



National  
College of  
Ireland

National College of Ireland  
**PROJECT  
SHOWCASE**  
School of Computing

**Final Year Student Profiles**

**24th MAY  
2017**

**Time**

**10.00-10.30am:** Industry / Academic networking  
reception hosted by Dean of School of Computing

**10.30-12.00pm** Viewing of the Project Showcase

**12-12.30pm:** Prize giving ceremony with keynote  
address from Cathriona Hallahan, Managing Director  
at Microsoft Ireland



**KTI**  
Knowledge Transfer Ireland  
Where Research & Business Connect

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# WELCOME

*from*

**Dr. Pramod Pathak**  
Dean of School of Computing

The annual School of Computing Knowledge Transfer Ireland Project Showcase at National College of Ireland is the highlight of our year where we recognise and celebrate the work of our final year computing students. It also marks the transition from their undergraduate degrees to their professional careers.

Our student's projects have been developed using various prevailing technologies and tools, specialising in different domains and we believe that a number of projects present commercial potential. NCI has often encouraged commercially focused endeavours with the help of venture capitalists, industrial partners, and Enterprise Ireland. Such partnerships continue to provide invaluable, real-world learning experiences and enrich our curricula.

To our students, congratulations and well done! It is a tough journey that you commenced four years ago. During this time you have shown great passion and commitment. Today, you now have the opportunity to choose a number of paths – a career in the ICT industry, an entrepreneurial endeavor or continue with a postgraduate qualification. Wherever your next chapter takes you, we hope that you will always remember your time at NCI and the friendships you have made.

We are delighted to invite guests from industry to come to NCI on the 24th May to meet our academic programme team from 10am - 10.30am and to view and discuss the various projects on display. More importantly, you will also have the opportunity to see first-hand the talent that exists within the student body in NCI from 10.30am -12.30pm. The staff and students look forward to meeting you and sharing these projects with you.

We look forward to welcoming you to National College of Ireland.

**Dr. Pramod Pathak**  
Dean, School of Computing



# Welcome message to employers from NCI Career Development & Employability

Within NCI's Career Development & Employability Service we have a strong bank of recruitment knowledge and experience. From seasoned graduate recruiters to talented guidance professionals we work with employers to develop effective, tailored solutions to help you reach our student body.

As a College we have a consistently strong employment record for our graduates and have won the national AHECS Award for Excellence in Employability in 2013, 2014 & 2016.

Bright, enthusiastic, motivated and grounded - our students have a lot to offer and we are delighted to welcome you on campus to meet with them. Partnering with the NCI Career Service is a great way to amplify your recruitment efforts and build your brand within NCI.

Career fairs, college-based speed networking events, mock interviews, insight sessions, guest lectures, mentoring programs and employer information sessions link employers to students — while giving students direct access to internships, part-time and summer jobs, and full-time employment.

We value our partnership with you and to learn more about how NCI Careers Service can assist you in recruiting high calibre students and graduates please contact:

**Caroline Kennedy, Careers Officer**  
caroline.kennedy@ncirl.ie; 01 4498526

**Helen Conway, Careers Advisor**  
helen.conway@ncirl.ie; 01-4498647

**Siobhan Mockler, Work Placement Supervisor.**  
Siobhan.mockler@ncirl.ie ; 01 4498558



# BSc (Hons) in Computing (Software Development)



**Adam Kearney**

**Project Title:** Days Are Numbered: Survival Game

**LinkedIn:** [www.linkedin.com/in/admkearney/](https://www.linkedin.com/in/admkearney/)

Days are Numbered is a 2D action survival game that gives the player a different experience each time they play. The game features a dynamic day and night cycle and random level generation. The goal of the game is to survive as long as you can while the difficulty increases with each day.

**Technologies used:** Photoshop, Gamemaker, Asprite

**STAND**  
**73**



**Alan Coleman**

**Project Title:** BoneStorm

**LinkedIn:** [www.linkedin.com/in/alancoleman94](https://www.linkedin.com/in/alancoleman94)

BoneStorm is a 3rd person shooter survival game developed in Unreal Engine 4 and using technologies such as Mixamo, Adobe Fuse, and the Epic Games Asset store. The objective of the game is for the player to manoeuvre through various levels while eliminating enemy characters.

**Technologies Used:** AutoDesk 3DS Max, Blender, Unreal Engine 4, Adobe Fuse 4, Mixamo

**STAND**  
**116**



**Conor Thompson**

**Project Title:** AEHelper - An Emergency Application

**LinkedIn:** [www.linkedin.com/in/conorthompson123/](https://www.linkedin.com/in/conorthompson123/)

AEHelper is an emergency assistant application, built to assist those in need of guidance and help with an emergency situation whilst waiting on actual emergency services to arrive to assess the situation.

**Technologies Used:** [www.linkedin.com/in/eamoncoleman/Sn](https://www.linkedin.com/in/eamoncoleman/Sn)

**STAND**  
**74**



**Eamon Coleman**

**Project Title:** NCI Hub: Automated Student Service

**LinkedIn:** [www.linkedin.com/in/eamoncoleman/](https://www.linkedin.com/in/eamoncoleman/)

NCI Hub is an application for students to help with their everyday college experience. The main aspect of the project is a Facebook Messenger Bot that uses artificial intelligence to provide services such as FAQs, displaying class room statuses and providing real time transport information.

**Technologies Used:** HTML, CSS, Javascript, Node.js, JSON, Facebook Developer, Heroku

**STAND**  
**68**





**Graham Gallagher**

**Project Title:** JobFlow - A Work Management System

**LinkedIn:** [www.linkedin.com/in/graham-gallaghernci](https://www.linkedin.com/in/graham-gallaghernci)

JobFlow ticketing system allows communication between different departments within an organisation using a simple to use, responsive web portal written in PHP and utilizing a MySQL database. It streamlines business processes and ensures efficiencies across departments.

**Technologies used:** HTML, CSS, SQL Server, MySQL, PHP, Bootstrap, XAMP

**STAND**  
**75**



**Graham Murray**

**Project Title:** Exograph -Social Network Graph Analysis

**LinkedIn:** [www.linkedin.com/in/graham-murray](https://www.linkedin.com/in/graham-murray)

**Project Description:** Exograph is a distributed cloud application that enables Recruitment Consultants to visually analyse their LinkedIn social network graphs. The solution allows them to understand how people in their networks are connected when sourcing potential candidates for a role.

**Technologies Used:** MySQL, Bootstrap, AWS, Python, Node.js, Express.js, Django, Linux, Neo4J

**STAND**  
**76**



**Ian Cunningham**

**Project Title:** Scriba-College

**LinkedIn:** [www.linkedin.com/in/ian-paul-cunningham](https://www.linkedin.com/in/ian-paul-cunningham)

Scriba-College is an Android application that serves as a study tool. The application enables students to store college files and annotate these files to recall important sections of the content by ways of interaction with the new digital stylus "Scriba".

**Technologies Used:** AngularJS, Ionic.io, Back&, Segment.io HTML5, SCSS, NoSQL

**STAND**  
**77**



**James English**

**Project Title:** Gradient

**LinkedIn:** [www.linkedin.com/in/jamesenglishjr](https://www.linkedin.com/in/jamesenglishjr)

Gradient is a social media website where content is dynamically shared between users based on similar interests. As users interests change so too does the content they receive. No friends, no followers, just interesting content.

**Technologies Used:** Javascript, MySQL, PHP, Laravel

**STAND**  
**86**



**John Deegan**

**Project Title:** GoalSpring

**LinkedIn:** [www.linkedin.com/in/deeganjohn/](https://www.linkedin.com/in/deeganjohn/)

**STAND**  
**78**

Time -we always think we have plenty of it until suddenly it's gone. GoalSpring is a web based application that aims to help young people balance the incredible pressures in modern education alongside making the most of their youth.

**Technologies Used:** CSS, Javascript, MySQL, Bootstrap, Node.js, Express.js



**Karl King**

**Project Title:** Whats in my fridge?

**LinkedIn:** [www.linkedin.com/in/kingkarl/](https://www.linkedin.com/in/kingkarl/)

**STAND**  
**79**

Whats in my Fridge is an android application centered around food and recipes. The user is able to search for recipes, follow instructions, upload images of their meals and also set timers while cooking.

**Technologies Used:** Android Studio, JAVA, Google Firebase's



**Navjot Singh Virk**

**Project Title:** Meeting Room Pro

**LinkedIn:** [www.linkedin.com/in/navjotvirk](https://www.linkedin.com/in/navjotvirk)

**STAND**  
**111**

Meeting Room Pro is a smart iOS application that helps people find and book meeting rooms. It also has other smart features like indoor navigation, room review and photo gallery and more. The application solves the problem of finding meeting rooms in large colleges and corporate buildings.

**Technologies Used:** MySQL, Eclipse, JAVA, Xcode, JSON, Swift, JQuery, SAP Hana, Apple Maps



**Oana Cozma**

**Project Title:** MappingIrishBrands (outside Ireland)  
-sentiment analysis

**LinkedIn:** [www.linkedin.com/in/oanacz/](https://www.linkedin.com/in/oanacz/)

**STAND**  
**80**

Measuring perceptions of top international Irish brands (beverage and consumer goods -asreported by IEA) of customers outside of Ireland. The system is build to stream large amounts of data, gather tweets, perform brand specific data mining (algorithms for natural languageprocessing -scoring each tweet), categorizing tweets based on location and visualise results for each brand on the world's map.

**Technologies Used:** HTML, CSS, Javascript, AWS, GitSCM, Python, Linux, JSON, Hadoop, HDFS, Bash, MapReduce



**Robert Dillon**

**Project Title:** NCI Placement 360

**LinkedIn:** [www.linkedin.com/in/robertdillonie](https://www.linkedin.com/in/robertdillonie)

**STAND**

**81**

This is a responsive web app written in PHP that allows placement students to log a list of technologies used during their placement. NCI Faculty can then mine this data to generate graphs and visualise industry trends using data from the entire student body.

**Technologies Used:** Javascript, MySQL, PHP, Bootstrap, Digital Ocean, Laravel, Selenium



**Robert Walsh**

**Project Title:** Park & Go -Android Parking App

**LinkedIn:** [www.linkedin.com/in/robertwalsh993/](https://www.linkedin.com/in/robertwalsh993/)

**STAND**

**46**

Building an Android App called Park and GO which can be used by small private car parks belonging to a doctor's office or any appointment based practice. It will allow the user to book a parking space that coincides with the time of their appointment.

**Technologies Used:** Android Studio, JAVA, NetBeans, Firebase Authentication, XML



**Soffyan Ali**

**Project Title:** CareFree

**LinkedIn:** [www.linkedin.com/in/soffyanali/](https://www.linkedin.com/in/soffyanali/)

**STAND**

**115**

CareFree is an android app build for IT professionals and for those who are looking for IT help in any form. Unique features include, chat messenger, notification of active/inactive users, recommendation and rating system.

**Technologies Used:** Javascript, SQL Server, MySQL, PHP, Android Studio, JAVA, NetBeans



**Adam  
O'Callaghan**

**Project Title:** Martello

**LinkedIn:** <https://www.linkedin.com/in/aocallaghan/>

**STAND**

**122**

Martello is a cloud-based application that utilises web mining and Natural Language Processing to monitor, analyse, and interpret news articles and social media posts. Martello is of particular interest to journalists and other media professionals whose roles make it critical that they stay informed of breaking stories in today's fast-moving news cycle.

**Technologies Used:** HTML, CSS, Javascript, MongoDB, Node.js, Express.js, Heroku





**Andrei Ivanov**

**Project Title:** Findasportclass

**LinkedIn:** [www.linkedin.com/in/andrei-ivanov-30989086/](https://www.linkedin.com/in/andrei-ivanov-30989086/)

Findasportclass is a web application that helps trainers-individuals advertise their sport classes. Users can search available sport classes using different search criteria, leave feedback and interact with the trainers.

**Technologies Used:** Bootstrap, AWS, MongoDB, Node.js, Angular 2

**STAND**  
**114**



**Ciaran Byrne**

**Project Title:** Squad

**LinkedIn:** [www.linkedin.com/in/ciar%C3%A1n-byrne-a5440bb9/](https://www.linkedin.com/in/ciar%C3%A1n-byrne-a5440bb9/)

Squad is a modern Android solution for organising sporting events amongst friends. It aims to take the headache out of organising matches with friends by automatically managing the members of your squad with notifications, confirmations and booking management.

**Technologies Used:** Android Studio, Google Firebase, Firebase Authentication

**STAND**  
**94**



**Conor Prunty**

**Project Title:** Online Booking System

**LinkedIn:** [www.linkedin.com/in/conor-prunty-9657b083/](https://www.linkedin.com/in/conor-prunty-9657b083/)

The Online Booking System is for sports-based companies to have the ability to take bookings online for areas which they have available for hire. This allows customers the option to book quickly and securely.

**Technologies Used:** HTML, CSS, Javascript, MySQL, PHP, Bootstrap

**STAND**  
**85**



**David Byrne**

**Project Title:** IronSight

**LinkedIn:** [www.linkedin.com/in/david-byrne-82a1a296/](https://www.linkedin.com/in/david-byrne-82a1a296/)

IronSight is a video game scheduler solution for the Android platform. The app features a massive game database, notifications, personal profiles and a recommendation system.

**Technologies Used:** Android Studio, JAVA, JSON, SQLite, Firebase Authentication

**STAND**  
**90**



**David McEvoy**

**Project Title:** Man Up, Speak Up

**STAND**

**24**

**LinkedIn:** [www.linkedin.com/in/davidmcevoy1/](https://www.linkedin.com/in/davidmcevoy1/)

Man Up, Speak Up is an Android application that helps Irish men with their mental health and teaches them new ways of thinking differently. The heart of the application is the news feed, where users receive context based advice based on how they feel; it all starts with an emoticon.

**Technologies Used:** Adobe Suite Creative Cloud, Android Studio, JAVA, Google Firebase, JSON, Google Maps API, Photoshop, Firebase Authentication



**Eoin Sutton**

**Project Title:** Movie-io - a great way for fans to share, review and discover great movies

**STAND**

**89**

**LinkedIn:** [www.linkedin.com/in/eoinsutton/](https://www.linkedin.com/in/eoinsutton/)

Movie-io is a responsive web app designed to allow users to search, discover, and review movies they love. Rate movies, collaborate with other reviewers, discover what's popular around you and share your favourites with friends.

**Technologies Used:** HTML, CSS, Javascript, MySQL, PHP, Google Maps API



**Fernando Paulo Correia Morais**

**Project Title:** FPV Race Manager

**STAND**

**121**

**LinkedIn:** [www.linkedin.com/in/fernando-morais](https://www.linkedin.com/in/fernando-morais)

This software is an First Person View Drone racing event management application which permits organizers to manage all aspect of a competition event.

Tasks such as pilot and team management, results and race reporting is all included and available as it connects directly to several race tracking systems.

**Technologies Used:** Node.js, Angular JS, Electron, VUE.js



**Fintan Murphy**

**Project Title:** GlucoHealth - The all-in-one diabetic health / fitness tool

**STAND**

**108**

**LinkedIn:** [www.linkedin.com/in/fintan-murphy-25269494/](https://www.linkedin.com/in/fintan-murphy-25269494/)

GlucoHealth works seamlessly with a glucometer device to enable diabetic users record and transmit blood sugar readings to store safely on their mobile devices for further review. It also incorporates reminders and a step counter to ensure optimal diabetic health/fitness management.

**Technologies Used:** HTML, CSS, MySQL, PHP, Android Studio, JAVA, JSON, SQLite, XML, EntraHealth API





**Graham Kinsella**

**Project Title:** Motor Monitor - Car Damage Monitoring System

**LinkedIn:** [www.linkedin.com/in/kinsellagraham/](https://www.linkedin.com/in/kinsellagraham/)

**STAND**

**26**

Motor Monitor is a live damage monitoring system for motor vehicles. It measures impacts to vehicles and if above a set threshold, then the owner is alerted to the damage. Geolocation data is recorded and photos are captured.

**Technologies used:** Python, Raspberry Pi 3, SQLite, Grovepi+



**Kevin Clarke**

**Project Title:** Jigsaw - Mental Health Service Record System

**LinkedIn:** <https://ie.linkedin.com/in/natalieedward>

**STAND**

**27**

The jigsaw application aims to reveal the bigger picture within the Mental Health service by providing clinicians and managers with the tools necessary to effectively monitor and manage patient records, and improve adherence to professional guidelines and protocols.

**Technologies Used:** HTML, CSS, Javascript, MySQL, PHP, Bootstrap, XAMP



**Niall Quinn**

**Project Title:** RFBBase : One place for your Fanbase

**LinkedIn:** [www.linkedin.com/in/niallquinn1/](https://www.linkedin.com/in/niallquinn1/)

**STAND**

**93**

RFBBase is a mobile marketing platform for Racing Drivers and Teams. Reach your fanbase through native iOS and Android applications. Deliver the latest news, media, race calendar, social streams and driver bios instantly to your loyal fans.

**Technologies Used:** HTML, CSS, Javascript, MySQL, Ruby On Rails, Android Studio, JAVA, Xcode, Swift



**Octavian Morcov**

**Project Title:** Interactive Cars

**LinkedIn:** [www.linkedin.com/in/octavian-morcov](https://www.linkedin.com/in/octavian-morcov)

**STAND**

**113**

If you want information about a car in a showroom, approach it and check your device. INTERACTIVE CARS works with beacons to automatically display content about the car in focus.

**Technologies Used:** HTML, MongoDB, Node.js, Express.js, Ionic Framework, Angular JS, Cordova Library, iBeacon



**Ronan Lafford**

**Project Title:** Spontaneous

**LinkedIn:** [www.linkedin.com/in/ronanlafford](https://www.linkedin.com/in/ronanlafford)

**STAND**

**99**

Eliminate boredom, share your passion and bring the community together! An Event app where you create the events. Create, discover and join various activities. Events are mapped around your current location. Geofencing notifies of nearby activities. Rate, review and upload your event photos.

**Technologies Used:** MySQL, PHP, Android Studio, AWS, JAVA, JSON, Google Maps API, XML





**Ronan Ratty**

**Project Title:** ClevaDeals

**LinkedIn:** [www.linkedin.com/in/ronanratty](http://www.linkedin.com/in/ronanratty)

**STAND**

**1**

Aimed at helping to promote local businesses "CleVaDeals.com" is a web application that allows local retailers and businesses to advertise their products and services. The web application uses the Google Maps API to allow users to search for these products based on their current location.

**Technologies Used:** SQL Server, Azure, C#, Google Maps API, ASP.net



**Sena Onsho**

**Project Title:** Disease Prediction System Using Data Mining

**LinkedIn:** [www.linkedin.com/in/SenaTesfaye](http://www.linkedin.com/in/SenaTesfaye)

**STAND**

**10**

The Disease Prediction system is an online application that allows users to enter their symptoms and get advice on the potential/predicted disease they may have. The system also allows users to interact and communicate with online available doctors who can provide immediate help/consultation.

**Technologies Used:** Javascript, SQL Server, Bootstrap, C#, Visual Studio, ASP.net



**Stephen McDonnell**

**Project Title:** IT Support Mobile Application

**LinkedIn:** [www.linkedin.com/in/stephenmcdonnell1995/](http://www.linkedin.com/in/stephenmcdonnell1995/)

**STAND**

**2**

IT Support Mobile Application is a compact android mobile application designed to help employees of large companies to contact IT Support while providing a cost effective solution for IT Managers. The application allows contact by email and also provides real-time information on systems updates.

**Technologies Used:** Android Studio, JAVA



**Stephen Tyrrell**

**Project Title:** SalesBoost - MS Dynamics CRM Sales Portal

**LinkedIn:** [www.linkedin.com/in/stephen-tyrrell](http://www.linkedin.com/in/stephen-tyrrell)

**STAND**

**25**

SalesBoost is a Microsoft Dynamics CRM portal designed to provide a light-weight, user friendly interface for sales people to increase their efficiency and workflow on across several device platforms.

**Technologies Used:** Javascript, SQL Server, Visual Studio .NET, C#, XML, Ms Dynamics, ASP.net

# BSc (Hons) in Computing: Cyber Security



**Anthony Slator**

**Project Title:** DIVerify

**LinkedIn:** [www.linkedin.com/in/anthony-slator](https://www.linkedin.com/in/anthony-slator)

**STAND**  
**61**

DIVerify is an application that ensures data integrity of documents by detecting unauthorised modifications. To accomplish this, the application adds a unique hash key to each document and compares the key each time the document is uploaded to the database.

**Technologies Used:** JavaScript, PHP, MySQL, Bootstrap, Android Studio, Apache Hosting Server, Cloud9.io, Google Map API.



**Conor Berkley**

**Project Title:** Vehicle Height Analyser

**LinkedIn:** [www.linkedin.com/in/conor-berkery/](https://www.linkedin.com/in/conor-berkery/)

**STAND**  
**98**

Developed an application to measure the height of large road vehicles and display the results on a digital screen. Using a digital camera to capture images of the vehicles, the height is measured using pixel count.

**Technologies Used:** JAVA



**Jelico Bachin**

**Project Title:** BestCarParks APP

**LinkedIn:** [www.linkedin.com/in/jelicob](https://www.linkedin.com/in/jelicob)

**STAND**  
**107**

A mobile iOS application using the Swift language which will contain web views displaying the website, created using PHP + MySQL. The mobile app will allow users to login and book parking, pay for clamping fees, view parking history and change bookings on the app.

**Technologies Used** HTML, CSS, Javascript, MySQL, PHP, Bootstrap, DIA, JAVA, XAMP, Xcode, Microsoft Office, Wordpress, Linux, JSON



**John McNamara**

**Project Title:** DeFend: Cyberbullying defence web application

**LinkedIn:** [www.linkedin.com/in/johnmcnamara00](https://www.linkedin.com/in/johnmcnamara00)

**STAND**  
**117**

DeFend is a web application that looks to educate teenagers on the topic of cyberbullying. The web application will provide information on combating cyberbullying as well as a forum where users can seek advice as well as help others.

**Technologies Used:** Javascript, Eclipse, JAVA, NetBeans, Ajax



**John Noone**

**Project Title:** GPS Encipher

**LinkedIn:** [www.linkedin.com/in/john-noone-john-noone-0246ba102](https://www.linkedin.com/in/john-noone-john-noone-0246ba102)

GPS Encipher is a native security android application which allows users to create a customised encryption key using a personal password and current GPS coordinates. The key will be used in a cryptographic algorithm to transform normal text into unreadable cipher text. In order to decrypt the text the user needs to return to the original encryption location.

**Technologies Used:** Teradata, Android Studio, Java JDK8, Google Firebase, SQLite

**STAND**

**42**



**Karl Lyons**

**Project Title:** Intelligent ChatBot

**LinkedIn:** [www.linkedin.com/in/karlllyons/](https://www.linkedin.com/in/karlllyons/)

**Project Description:** Intelligent ChatBot is a conversational chatbot developed with Microsofts Bot Framework. Withthis, you can have a conversation about anything you like. The ChatBot uses APIs to source it's information. Other features include image captioning, pizza ordering and more.

**Technologies Used:** Visual Studio .NET, Azure, C#, Node.js, Facebook Developer

**STAND**

**43**



**Kevin Moss**

**Project Title:** Advanced Image Authentication Level

**LinkedIn:** [www.inkedin.com/in/kevin-moss](https://www.inkedin.com/in/kevin-moss)

Advanced Image Authentication level will add a much needed additional level of security to applications containing sensitive data. The additional security of hashing the image measurements will ensure the confidentiality, integrity and availability of the application security level is maintained at all times.

**Technologies Used:** HTML, CSS, Javascript, MySQL, Visual Studio .NET, Azure, C#, GitSCM, Visual Studio

**STAND**

**44**



**Niamh Griffin**

**Project Title:** eClip -Eclipse plugin

**LinkedIn:** [www.linkedin.com/in/niamhgriffin95](https://www.linkedin.com/in/niamhgriffin95)

eClip is an Eclipse plugin that aids developers in implementing software more efficiently. The main functionality allows developers to save code snippet experiments in one place. Some security features in eClip are authentication of users, access controls to the code, encryption to the database and sharing of experiments once approved by the experiment owner.

**Technologies used:** MySQL, PHP, Eclipse, JAVA, Java JDK8, NetBeans

**STAND**

**45**





**Stephen Harris**

**Project Title:** Invoice System Security

**LinkedIn:** [www.linkedin.com/in/stephen-luke-harris-398073b5/](https://www.linkedin.com/in/stephen-luke-harris-398073b5/)

This is a Dynamic web project built in Eclipse using Java. The project mainly focuses on security features with AES Encryption and Database security and Access Control and protecting against OWASP top 10 Web Application Vulnerabilities.

**Technologies Used:** HTML, CSS, Javascript, SQL Server, MySQL, Bootstrap, Eclipse, JAVA, Java JDK8, JQuery

**STAND**

**8**



**Stephen Kelly**

**Project Title:** Intrusion Detection System for Malicious Emails

**LinkedIn:** [www.linkedin.com/in/stephenkelly7](https://www.linkedin.com/in/stephenkelly7)

People use email as their fundamental method of sharing information over the web. During this transfer, malicious emails are received which can cause problems on the server/client side. This IDS scans all received emails, marks some of them as malicious and enters them into a database.

**Technologies Used:** HTML, CSS, Javascript, SQL Server, MySQL, JAVA, NetBeans

**STAND**

**6**



**Timothy Yong**

**Project Title:** Data Integrity Checker

**LinkedIn:** [www.linkedin.com/in/timothy-yong](https://www.linkedin.com/in/timothy-yong)

Data Integrity Checker is a secure web based and database driven application, where users can check the security and integrity of their uploads. Users can generate reports on their files to view its metadata in a structured format.

**Technologies Used:** HTML, C#, Visual Studio

**STAND**

**102**



**Veronica Ancuta**

**Project Title:** E-Leukemia Web Application

**LinkedIn:** [www.linkedin.com/in/vcristinaancuta/](https://www.linkedin.com/in/vcristinaancuta/)

Secure web application used to streamline the process of leukaemia treatment by providing all information electronically. The application can be accessed by hospital staff and patients on demand in real-time. Unique security features include: user authorisation, multi-factor authentication, secure connections and access control which offer protection of data integrity, availability and confidentiality.

**Technologies Used:** HTML, CSS, Javascript, SQL Server, Visual Studio .NET, Bootstrap, Azure, C#

**STAND**

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# BSc (Hons) in Computing:

## Mobile Application Development



**Conor Keenan**

**Project Title:** In Time -An Alarm for Punctual People

**LinkedIn Profile:** [www.linkedin.com/in/ckeenan23/](https://www.linkedin.com/in/ckeenan23/)

In Time is a full stack android alarm clock that adjusts the activation time depending on current and predicted traffic conditions. Its purpose is to prevent lateness due to unforeseen traffic circumstance. The application is built in conjunction with a node based web service to perform logical calculations and act as a proxy for network request.

**Technologies Used:** Android Studio, Java JDK8, MongoDB, Digital Ocean, Nginx, Node.js, Express.js

**STAND**

**12**



**Franciele Firmino  
Da Silva**

**Project Title:** Drogheda Animal Rescue Mobile App

**LinkedIn:** [www.linkedin.com/in/firminofranciele/](https://www.linkedin.com/in/firminofranciele/)

DAR is an Android Application which displays animals available for adoption, that are currently in Drogheda Animal Rescue's care. It also assists the volunteers on their daily tasks, using API calls and Google Firebase.

**Technologies used:** Android Studio, JAVA, Google Firebase, JSON

**STAND**

**14**



**Ian Arbuckle**

**Project Title:** FitNow

**LinkedIn:** [www.linkedin.com/in/ianarbuckle/](https://www.linkedin.com/in/ianarbuckle/)

The objective of the mobile app is to allow the user to track and improve their fitness by using gamification methods. Gamification is the concept of applying game mechanics such as leaderboards to engage users to achieve their goals. It will also allow users to share their fitness activities with their friends and peers.

**Technologies Used:** Android Studio, JAVA, Google Firebase, JSON, Android Wear

**STAND**

**3**



**Jamie O'Niell**

**Project Title:** Now You're Talking

**LinkedIn:** [www.linkedin.com/in/oneilljamie](https://www.linkedin.com/in/oneilljamie)

Now You're Talking is an android application focused on teaching users new languages through gamification and allows users to arrange meet ups with each other in real time based on level of experience gained from the app.

**Technologies:** Android Studio, JAVA, Google Firebase, JSON.

**STAND**

**4**



**Maricel Buiciuc**

**Project Title:** BangOnTaxiApp Multiplatform mobile app for taxi drivers

**LinkedIn:** [www.linkedin.com/in/maricelcostelbuiciuc](https://www.linkedin.com/in/maricelcostelbuiciuc)

An iOS and Android mobile app that provides real time information for taxi drivers. This helps them to be more efficient on the roads. The app has a speech recognition software integrated, where drivers can leave voice messages, which are transformed automatically into written messages and displayed on the app.

**Technologies:** HTML, Google Firebase, Ionic Framework, Angular JS, Cordova Library

**STAND**  
**5**



**Marius Brivinskas**

**Project Title:** Challenger fitness Android application

**LinkedIn:** [www.linkedin.com/in/marius-brivinskas](https://www.linkedin.com/in/marius-brivinskas)

Challenger is a mobile application that seeks to provide a fun and an effective way to encourage people for fitness activities. Unique features of the app is user made challenges where people compete for experience points and higher position in the leader board.

**Technologies Used:** Android Studio, JAVA, Google Firebase

**STAND**  
**6**



**Mark Kirby**

**Project Title:** Gym Buddies: A Social Health and Fitness Application for iOS

**LinkedIn:** [www.linkedin.com/in/markkirby88](https://www.linkedin.com/in/markkirby88)

Gym Buddies is a community based health and fitness mobile application. It will offer a social environment for people interested in health and fitness. The application offers a potentially endless supply of workout programs and a community where users can advise and aid each other with their health and fitness goals via cloud messaging.

**Technologies Used:** Xcode, Google Firebase, Google Maps API, Swift, Firebase Authentication

**STAND**  
**7**



**Matthew Whelan**

**Project Title:** The Little Things

**LinkedIn:** [www.linkedin.com/in/matthew-whelan8/](https://www.linkedin.com/in/matthew-whelan8/)

The Little things mobile app is based on the HSE's little things campaign which helps people with mental health difficulties. The app focuses on both the physical and mental health of the user.

**Technologies Used:** Android Studio, JAVA, Google Firebase, XML

**STAND**  
**92**





**Nathan Ryan**

**Project Title:** NCIProjects: Project Showcase Web Portal

**LinkedIn:** [www.linkedin.com/in/nathanryan26](https://www.linkedin.com/in/nathanryan26)

An ASP.NET MVC 5 application which allows final year students to submit all relevant information regarding their project in a specified format for use in the Project Showcase Booklet produced by NCI Careers staff.

**Technologies Used:** SQL Server, Visual Studio .NET, Azure, C#

**STAND**

**28**



**Ronan Browne**

**Project Title:** Bike Pro - Theft prevention and theft recovery system for bicycles

**LinkedIn:** [www.linkedin.com/in/ronanbrowne88](https://www.linkedin.com/in/ronanbrowne88)

Mobile application which interfaces with remote sensors to track unauthorized movements of a user's bike. It allows a user to register their bike and record it if it is stolen. This information is stored on a remote cloud database. It can also turn any user's mobile device into a scanner for stolen bikes which have an embedded sensor.

**Technologies used:** Android Studio, JAVA, Google Firebase, JSON, iBeacon, Estimote Proximity Sensors

**STAND**

**29**



**Ruth Doran**

**Project Title:** Drop Solutions

**LinkedIn:** [www.linkedin.com/in/ruth-doran](https://www.linkedin.com/in/ruth-doran)

A mobile application for delivery companies. It provides the user access to a number of functionalities, such as finding the most optimal route to a number of addresses and current location with the use of Google Maps. It allows the user to edit their account, reset a password or change an email address with the use of Google Firebase.

**Technologies Used:** Android Studio, Google Firebase, Google Maps API, Firebase Authentication

**STAND**

**37**



**Stephen Roberts**

**Project Title:** Auto Messenger

**LinkedIn:** [www.linkedin.com/in/stephen85roberts15](https://www.linkedin.com/in/stephen85roberts15)

Auto Messenger is an Android app that aims to aid the user in self security. This is done by allowing the app automatically send automated messages to users or groups (authorised by the user) when the user device connects to a WIFI network.

**Technologies Used:** Android Studio, JAVA, Google Firebase, Microsoft Office, Firebase Authentication

**STAND**

**30**



**Terence Sheridan**

**Project Title:** SKEWLEY - Student optimization web application.

**LinkedIn:** [www.linkedin.com/in/terence-sheridan-01857b119/](https://www.linkedin.com/in/terence-sheridan-01857b119/)

SKEWLEY allows parents and teachers to communicate by adopting many of the most popular social media functionalities. It achieves student evaluation optimization by implementing a filtration system for efficiency and displaying Student progress metrics via charts for effectiveness.

**Technologies Used:** HTML, CSS, Javascript, MySQL, PHP, Cloud 9

**STAND**

**100**

## BSc (Hons) in Computing: Gaming and Multimedia



**Adam Butterly**

**Project Title:** Gemini

**LinkedIn:** [www.linkedin.com/in/adam-butterly](https://www.linkedin.com/in/adam-butterly)

Gemini is a first-person shooter with action-adventure and shoot 'em up elements for gamers of all skill levels. The game is a straight forward blaster at its heart and focuses on eliminating hordes of an alien race. The player will do this through upgrading the characters abilities and arsenal of weapons.

**Technologies Used:** Blender, Unreal Engine 4, AutoDesk Maya, Unreal Blueprints, Photoshop

**STAND**

**63**



**Aron Jackson-Ryan**

**Project Title:** Going Noire

**LinkedIn:** [www.linkedin.com/in/aronjryan/](https://www.linkedin.com/in/aronjryan/)

Going Noire is a stylised single player detective game created in Unity, where the player must travel across the globe and search crime scenes for clues and hints, piecing together information linking each murder, ensuring the player is always one step behind the killer.

**Technologies Used:** Unity, C#, Visual Studio, Maya

**STAND**

**64**



**Conor Das**

**Project Title:** Survive

**LinkedIn:** [www.linkedin.com/in/conordas](https://www.linkedin.com/in/conordas)

Survive is an 3rd person action game developed using Unity in which a user must battle against waves of enemies and try to survive through as many waves as possible without dying. The players score will then be uploaded to a leaderboard.

**Technologies Used:** Unity, C#, Visual Studio, Mixamo

**STAND**

**65**



**Conor Donnelly**

**Project Title:** Construction Mayhem

**LinkedIn:** [www.linkedin.com/in/conor-donnelly-a16a08106/](https://www.linkedin.com/in/conor-donnelly-a16a08106/)

Construction Mayhem is a game where you, a construction worker driving a forklift, need to collect the bricks scattered around the construction site in order to build a spectacular building.

**Technologies Used:** Unity, C#, Visual Studio, Mayar.

**STAND**

**84**



**Daniel Benhamou**

**Project Title:** Sparking Steel

**LinkedIn:** [www.linkedin.com/in/daniel-benhamou/](https://www.linkedin.com/in/daniel-benhamou/)

Sparking Steel is a portable Virtual Reality videogame played using a Gear VR headset, a Samsung Phone and a Bluetooth Controller. Sitting in the pilot seat of a giant robot, punch and dodge the opposing robot as you tower over buildings.

**Technologies Used:** Unity, Blender, Visual Studio

**STAND**

**66**



**Dean Byrne**

**Project Title:** TerraCraft

**LinkedIn:** [www.linkedin.com/in/deanbyrne95](https://www.linkedin.com/in/deanbyrne95)

TerraCraft is a pixel-2D side-scroller survival sandbox RPG. It will be made in the Unity Game Engine and will be available for Windows, Mac and Linux machines. It includes an inventory, crafting and world generation systems.

**Technologies Used:** Unity, Adobe Suite Creative Cloud, C#, Visual Studio

**STAND**

**67**



**James McConville**

**Project Title:** Army Ants - 3rd Person Game

**LinkedIn:** [www.linkedin.com/in/james-mcconville](https://www.linkedin.com/in/james-mcconville)

Army Ants is a 3rd person shooter game, which is built in Unity engine and utilises Rain AI for pathfinding and attacking in single player mode. For those who wish to pit their skills against others, a multiplayer platform will be provided with additional vehicles for that added test of skill. The game includes a location map and player's performance is measured on healthbar.

**Technology used:** Unity, AWS, Blender, C#, Visual Studio, Rain AI, AutoDesk Maya

**STAND**

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**Jefferson Tolentino**

**Project Title:** Adrift

**LinkedIn:** [www.linkedin.com/in/jefferson-t/](https://www.linkedin.com/in/jefferson-t/)

**STAND**

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Adrift is a first person semi-open world game set in an unknown location. The game is built using Unreal 4. The player is given a weapon and must survive his journey solving puzzles and hiding or fighting enemies.

**Technologies Used:** AutoDesk 3DS Max, Blender, Unreal Engine 4, AutoDesk Maya, U Audacity



**Keith Lok**

**Project Title:** Nostalgic Path

**LinkedIn:** [www.linkedin.com/in/keith-lok/](https://www.linkedin.com/in/keith-lok/)

**STAND**

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An exploration game set in a 3D environment. Works with or without VR device. The player is not alone in this environment. The player must progress through the game to uncover what is happening and move forward while trying to survive the enemies that lurk in the world.

**Technologies Used:** AutoDesk 3DS Max, Unreal Engine 4, AutoDesk Maya



**Kevin Roberts**

**Project Title:** Pawns of War

**LinkedIn:** [www.linkedin.com/in/kevin-a-roberts/](https://www.linkedin.com/in/kevin-a-roberts/)

**STAND**

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Pawns of War is a two-player strategy game that closely follows the rules of chess. It is set in a 3D world in which two player will use high level tactics and strategy to become victorious with their chosen clan. The different levels in this game will represent the home world of both clans.

**Technologies Used:** Unity, Blender, C#, MonoDevelop, Maya



**Lee Redmond**

**Project Title:** Fear Of My Dreams

**LinkedIn:** [www.linkedin.com/in/leeredmond94/](https://www.linkedin.com/in/leeredmond94/)

**STAND**

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Fear of My Dreams is a horror game that will test the player to beat their dreams. Fear of My Dreams was built in Unreal Engine 4 and uses Blueprint programming. Game includes realistic graphics from Unreal Engine. Player competes against a timer to gain the best score that is displayed on the screen and end of the level.

**Technologies Used:** C++, Blender, Unreal Engine 4, Mixamo, Adobe Fuse, Unreal Blueprints, Photoshop



**Neil Vaughan**

**Project Title:** StarShine

**LinkedIn:** [www.linkedin.com/in/neilvaughan1](https://www.linkedin.com/in/neilvaughan1)

**STAND**

**21**

StarShine is a first person shooter game where the player must navigate a level as fast as possible. The level is a 3D environment featuring pickups and secret routes. It was created using the Unreal Engine.

**Technologies Used:** Unreal Engine 4, Unreal Blueprints



**Sean Trant**

**Project Title:** Cargo Race

**LinkedIn:** [www.linkedin.com/in/setrant/](http://www.linkedin.com/in/setrant/)

Cargo Race is an intense racing experience in which players are tasked with transporting cargo from point A to B. They will be challenged by a harsh jungle terrain and a very hungry, angry gorilla trying to catch them.

**Technologies:** Unity, C#, Visual Studio, MonoDevelop, AutoDesk Maya

**STAND**  
**72**



**Shane Malone**

**Project Title:** Divinity Awakens: The Divine Emblem  
- A RPG Maker Game

**LinkedIn:** [www.linkedin.com/in/shanemalone0/](http://www.linkedin.com/in/shanemalone0/)

Divinity Awakens is a RPG with a unique story that allows you change elements of the story based on the decisions you make. Divinity Awakens was developed on RPG Maker MV using javascript with the support of Yanfly Engine plugins.

**Technologies Used:** Javascript, RPG Maker MV

**STAND**  
**62**



**Steffan Schmieder**

**Project Title:** Smart Lock

**LinkedIn:** [www.linkedin.com/in/steffanschmieder/](http://www.linkedin.com/in/steffanschmieder/)

Smart Lock is an Android Studio application that wireless connects to a smart locking system. Users can lock/unlock their smart lock from anywhere in the world. Grant access to their friends and revoke access at any time. Receive notifications whenever your door opens or closes.

**Technologies Used:** Android Studio, Python, Raspberry Pi, Grovepi+, Amazon Web Services

**STAND**  
**110**

## BSc (Hons) in Computing: Data Analytics



**Adam Horrigan**

**Project Title:** Zen Warehouse

**LinkedIn:** [www.linkedin.com/in/adam-horrigan](http://www.linkedin.com/in/adam-horrigan)

Zen Warehouse is a data warehousing project, completed for the CoderDojo Foundation. Its purpose is to turn the Foundation into a data driven organisation and to have statistics readily available, to aid business decisions.

**Technologies used:** Javascript, AWS, GitSCM, Python, R, Tableau, Node.js

**STAND**  
**53**





**Alan Sullivan**

**Project Title:** An Analysis and Comparison of Students in 3rd Level Education

**LinkedIn:** [www.linkedin.com/in/alan-sullivan](http://www.linkedin.com/in/alan-sullivan)

Analysing NCI student data of 17-22yrs (school leavers) and 23yrs plus (mature students), this project uses technologies such as R and Python to analyse and determine which subset is achieving better results in higher numbers. These results will then be presented in Tableau for easy end user interpretation.

**Technologies Used:** MySQL, Excel, Data Analysis Toolpak for Excel, Python, R, SPSS Statistics, Tableau.

**STAND**  
**54**



**Alexander Hill**

**Project Title:** League of Legends - A Detailed Analysis

**LinkedIn:** [www.linkedin.com/in/alexhii/](http://www.linkedin.com/in/alexhii/)

Why is there such a bias in a massively popular game, which is constantly expanding? This research project takes a look at why players favour one method of playing over the other endless varieties.

**Technologies Used:** Excel, Python, R, SPSS, SPSS Statistics, MapReduce

**STAND**  
**101**



**Anthony Bloomer**

**Project Title:** Smartmove

**LinkedIn:** [www.inkeidn.com/in/anthonybloomer](http://www.inkeidn.com/in/anthonybloomer)

Smartmove aims to provide businesses and consumers with intelligence enabling them to gain insight into the property market in Ireland and the UK. Smartmove features a Data Warehouse, RESTful API and an in-depth analysis in R.

**Technologies Used:** MySQL, Python, R

**STAND**  
**106**



**Christopher Doran**

**Project Title:** Automated External Defibrillator (AED) Distribution: Analysis on AED distribution in Leinster

**LinkedIn:** [www.linkedin.com/in/chrisdoran1](http://www.linkedin.com/in/chrisdoran1)

RStudio was used to explore data from the National Ambulance and Dublin Fire Brigade services. Machine Learning Algorithms were built to predict ideal AED locations based on emergency service response times, locations, population and existing AED locations that could reduce Sudden Arrhythmic Death Syndrome mortality rates.

**Technologies Used:** SQL Server, MySQL, R, SPSS, Tableau

**STAND**  
**32**



**Damien Grouse**

**Project Title:** A study of natural usage and sentiment analysis of Electric Ireland and Bord Gais customers

**LinkedIn:** [www.linkedin.com/in/DamienGrouse](http://www.linkedin.com/in/DamienGrouse)

A study of Electric Ireland and Bord Gais customers, who have moved to smart meters. This project is concentrating on user's sentiment regarding the switch and on user's consumption of these utilities. Consumption findings have been requested by the CSO.

**Technologies used:** SQL Server, MySQL, Data Analysis Toolpak for Excel, Python, R, SPSS Statistics, Tableau, Weka

**STAND**  
**33**





**Daniel Gorman**

**Project Title:** Sports Analytics - Analysis of the National Football League

**LinkedIn:** [www.linkedin.com/in/danielgorman95](https://www.linkedin.com/in/danielgorman95)

This project involves gathering datasets associated with the NFL for predicting the Return On Investment (ROI) in players to the organisation based on previous season statistics, contracts and physical attributes. RStudio is used to process & build a machine learning algorithm, and Tableau is used to visually interpret the results.

**Technologies Used:** MySQL, Excel, Data Analysis Toolpak for Excel, R, SPSS Statistics, Tableau

**STAND**

**35**



**Declan Barnes**

**Project Title:** Identifying New HSE Support Centre Locations In Leinster.

**LinkedIn:** [www.linkedin.com/in/declan-barnes](https://www.linkedin.com/in/declan-barnes)

The focus of this project is to identify new locations in Leinster for the future placement of HSE support centres. This project will also contain a Java application, which will allow the user to select and view various disability analysis in Leinster.

**Technologies Used:** MySQL, JAVA, NetBeans, R

**STAND**

**34**



**Dylan Walker**

**Project Title:** Outback

**LinkedIn:** [www.linkedin.com/in/dylanwalker365/](https://www.linkedin.com/in/dylanwalker365/)

Outback is a 2D mobile game designed in Unity for a mobile format. The objective is for the player to survive until the end of the level by avoiding hazards and obstacles in the environment.

**Technologies Used:** Unity, C#

**STAND**

**36**



**Ebin Lazer Paiva**

**Project Title:** CarAffordability

**LinkedIn:** [www.linkedin.com/in/ebin-paiva-692675b2](https://www.linkedin.com/in/ebin-paiva-692675b2)

A web application explicitly based on detailed analysis of car sales with respect to various criteria that could shed light on past and current trends in the market and allows for predictive outcomes, which can aid prompt decision making..

**Technologies Used:** HTML, Javascript, MySQL, PHP, R, XAMP

**STAND**

**13**



**Eoin Murphy**

**Project Title:** Social Observatory - Slideshare

**LinkedIn Profile:** [www.linkedin.com/in/EoinMurphy1994](https://www.linkedin.com/in/EoinMurphy1994)

The purpose of this project is to crawl the website Slideshare for information such as description, users, recommendations and comments. Performed a sentiment analysis on the comment section on the different categories of slideshare.

**Technologies Used:** SQL Server, MySQL, GitSCM, Python, R

**STAND**

**38**



**Faisal Bashar**

**Project Title:** EPL Analysis: Sentimental and Predictive Analysis

**LinkedIn:** [www.linkedin.com/in/fasialbashar](https://www.linkedin.com/in/fasialbashar)

**STAND**  
**39**

EPL Analysis is a Data Analytics project based on the English Premier League, where Tweets will be gathered during the matches. Sentimental Analysis will be performed on the gathered data to find out how fans reactions change during the match. Also Predictive Analysis will be performed on players statistics.

**Technologies Used:** Python, R



**Keith Carpenter**

**Project Title:** Text Analytics - Analysis of Political Media

**LinkedIn:** [www.linkedin.com/in/keithcarpenter23](https://www.linkedin.com/in/keithcarpenter23)

**STAND**  
**95**

This project will explore how politicians portray themselves through speeches, books, articles and social media. Text analytics will be used to generate sentiment analysis, similarity of documents and more using R, Python and Watson to gain an insight into how politicians represent themselves through text based media platforms.

**Technologies Used:** MySQL, Python, R, SPSS Statistics, Tableau



**Mina Gaid**

**Project Title:** SCP (Sequential Control Panel)

**LinkedIn:** [www.linkedin.com/in/mina-gaid/](https://www.linkedin.com/in/mina-gaid/)

**STAND**  
**51**

SCP is a web application - KPI dashboard designed to help everyday people to better invest their money on the stock market. Machine learning is used along with statistical analysis to identify patterns in the market and forecast results.

**Technologies Used:** HTML, CSS, Javascript, MySQL, Bootstrap, Excel, Python, R, SPSS Statistics, Weka, Django



**Nai Bin Pan**

**Project Title:** My Time App

**LinkedIn:** [www.linkedin.com/in/naibin-pan](https://www.linkedin.com/in/naibin-pan)

**STAND**  
**103**

**Project Description:** My Time App is an Android phone app that can help users to calculate the time spent at a specific location. This location is firstly created on the map in the app. The users can check an analysis diagram to organise their time better.

**Technologies Used:** MySQL, Android Studio, Cloud 9, JAVA, Google Maps API, SQLite, XML



**Neil Gallagher**

**Project Title:** Brew Your Beer Website, Database and Technological Solution

**LinkedIn:** [www.linkedin.com/in/gallagherjamesneil](https://www.linkedin.com/in/gallagherjamesneil)

This project is designed to provide Brew your Beer with the means to provide customisable service to their customers and tailor the taste, look and feel of the product to perfection. It is an online ordering system for craft beer products.

**Technologies Used:** CSS, Javascript, MySQL, Bootstrap, JAVA, JSON

**STAND**

**87**



**Sean Mc Dermott**

**Project Title:** Future Housing

**LinkedIn:** [www.linkedin.com/in/seanmcd1/](https://www.linkedin.com/in/seanmcd1/)

Future Housing aims to describe and predict housing prices throughout Dublin by introducing the distance to public transport stations as the main factor of the prediction. The distances, including other variables, will be run through an algorithm to predict the result.

**Technologies Used:** C#, XAML, HTML, SQL, Microsoft Azure Mobile Services, Visual Studio

**STAND**

**40**



**Tomas Siniauskas**

**Project Title:** PUB-OP

**LinkedIn:** [www.linkedin.com/in/tomas-siniauskas](https://www.linkedin.com/in/tomas-siniauskas)

PUB-OP is a web scraper which builds a social network map using existing APIs such as Twitter. This data is saved to a database where it can be used for analysis such as sentiment analysis and user interaction.

**Technologies Used:** HTML, Javascript, MySQL, Bootstrap, Python, R, Heroku

**STAND**

**91**



**Usman Akhtar**

**Project Title:** Gaming Rating

**LinkedIn:** [www.linkedin.com/in/usmanakhtarali/](https://www.linkedin.com/in/usmanakhtarali/)

This web app allows users to browse through a large collection of games and gain valuable information about them. Extracting data from various social media sites such as Twitter, Youtube and gaming websites, users will gain more information on descriptions, trailers and ratings of the game.

**Technologies used:** HTML, Javascript, MySQL, PHP, Bootstrap, Excel, Net-Beans

**STAND**

**97**





Warda Obed

**Project Title:** Warehouse Administration System

**LinkedIn:** [www.linkedin.com/in/warda-obed](http://www.linkedin.com/in/warda-obed)

This desktop and mobile application is used to manage inventory for an organization. Users can log the movement of stock and present reports on a monthly basis alongside inventory analysis graph.

**Technologies Used:** HTML, Javascript, SQL Server, PHP, Bootstrap, Cloud 9, Data Analysis Toolpak for Excel, JAVA, NetBeans, XML

**STAND**  
**96**

## BSc (Hons) in Computing: Internet of Things



Conor Breen

**Project Title:** OpenSesamessage

**LinkedIn:** [www.linkedin.com/in/conor-breen](http://www.linkedin.com/in/conor-breen)

OpenSesamessage - the smart solution to home entry. No longer do you need to leave a key out, or have new ones cut. This system allows users to access their homes with their mobiles. You can take control over who has access to your home with the control panel on opensesamessage.com.

**Technologies Used:** Ruby On Rails, Python, Digital Ocean, Raspberry Pi, Docker, Grovepi+, PostgreSQL

**STAND**  
**120**



Conor Greenan

**Project Title:** Waft Run

**LinkedIn:** [www.linkedin.com/in/conor-greenan-a18798130/](http://www.linkedin.com/in/conor-greenan-a18798130/)

Waft Run is a Unity 3D game developed with the use of a IoT Device (Leap Motion). It is a game based on movement. The aim is to complete the map in the shortest time, while defending against AI.

**Technologies Used:**

**STAND**  
**55**



Conor Sheridan

**Project Title:** Motion Security System

**LinkedIn:** [www.linkedin.com/in/conor-sheridan/](http://www.linkedin.com/in/conor-sheridan/)

The personal security system allows a user monitor a specific place of their choice. The system can be used for security reasons and the system will alert a user with a push notification and record all data to a specified location.

**Technologies Used:** Android Studio, Python, Raspberry Pi

**STAND**  
**105**



**Declan Casey**

**Project Title:** WaiterAider

**LinkedIn:** [www.linkedin.com/in/declancasey](https://www.linkedin.com/in/declancasey)

WaiterAider is an Android Application used alongside IoT technologies which can be used in restaurants to replace the need for waiters taking customer orders. The application can also be used to keep count of current stock.

**Technologies Used:** Android Studio, AWS, Python, Raspberry Pi, Firebase Authentication

**STAND**

**88**



**Jack Haymes**

**Project Title:** Plant Hydration Notification System

**LinkedIn:** [www.linkedin.com/in/jack-haymes-23322763/](https://www.linkedin.com/in/jack-haymes-23322763/)

This system uses a Raspberry Pi with an attached moisture sensor to monitor the levels of water in your house plants. Users download an associated Android application that will notify the user when the water content of the soil drops below a certain level, indicating that the plant needs to be watered.

**Technologies used:** MySQL, Android Studio, AWS, Cloud 9, IBM Rational Rose, JAVA, Python, Raspberry Pi

**STAND**

**56**



**Jakub Nazar**

**Project Title:** Helheimr - Unreal Engine 4 Hack and Slash Game

**LinkedIn:** [www.linkedin.com/in/jakubnazar](https://www.linkedin.com/in/jakubnazar)

Helheimr is fast paced, isometric hack and slash game where the player takes on hordes of bloodthirsty monsters. The game utilises the realistic graphics of Unreal Engine 4 and it delivers crisp and grim Viking world.

**Technologies Used:** Unreal Engine 4, Mixamo, Adobe Fuse, Unreal Blueprints

**STAND**

**57**



**Niall Curran**

**Project Title:** OWN THE SPOT – Friendly Competition

**LinkedIn:** [www.linkedin.com/in/niall-curran](https://www.linkedin.com/in/niall-curran)

Hoarder is a barcode scanning shopping application which can be used on any android device. The idea is that a user will walk through a supermarket, scan each item before adding it to their cart and when ready, make a payment using their credit/debit card.

**Technologies Used:** Android Studio, MongoDB, Node.js, JSON, Google Maps API, SQLite, Heroku

**STAND**

**112**





**Niall Martin**

**Project Title:** An Analysis of Temperature and Humidity in student housing using a Raspberry Pi

**LinkedIn:** [www.linkedin.com/in/nialldmartin](https://www.linkedin.com/in/nialldmartin)

An Analysis of Temperature and Humidity in student housing using a Raspberry Pi is a hardware and software system that monitors an environment, through measuring temperature and humidity levels, looking for mould growth conditions. This system has been designed to be used in student housing and provides accurate information to its users by displaying the environmental conditions via a website.

**Technologies Used:** SQL Server, MySQL, Python, Raspberry Pi 3, Linux, SQLite

**STAND**  
**15**



**Peter Barry**

**Project Title:** Raspberry Pi Weather Analyser

**LinkedIn:** [www.linkedin.com/in/peter-barry](https://www.linkedin.com/in/peter-barry)

Raspberry Pi (Rpi) Weather Analyser is an Internet of Things (IoT) application that collects weather data. Rpi has sensors attached that are placed outside to collect data on wind pressure, temperature & humidity, UV rays and rainfall. The readings are sent back to a database for analysis.

**Technologies Used:** HTML, CSS, Javascript, MySQL, PHP, Python, XAMP

**STAND**  
**31**



**Richard Mangan**

**Project Title:** RapidARM: Active Response Monitoring

**LinkedIn:** [www.linkedin.com/in/richmangan](https://www.linkedin.com/in/richmangan)

RapidARM is an emergency response service for monitoring users who are at risk of cardiac arrest and raising the alarm in the event of an emergency. The service monitors heart activity in real-time and can notify the user, a chosen contact or the ambulance service of an emergency.

**Technologies Used:** Android Studio, JAVA, NetBeans, Python, Google Firebase

**STAND**  
**58**



**Ronan Smith**

**Project Title:** NCI Booking System

**LinkedIn:** [www.linkedin.com/in/ronan-smith](https://www.linkedin.com/in/ronan-smith)

Developed a web application which will allow students to book classrooms online and will be a facility in NCI. The Application includes a database of all classrooms and capacities, built using Visual Studio and a password protected login function. Web Application will be hosted on Azure.

**Technologies Used:** HTML, CSS, SQL Server, MySQL, Visual Studio .NET, Bootstrap, Azure, C#

**STAND**  
**59**





**Youcef O'Connor**

**Project Title:** Bobo: Taxi usage made safer

**LinkedIn:** [www.linkedin.com/in/youcefoconnor](https://www.linkedin.com/in/youcefoconnor)

Bobo is a mobile app that will make taxi usage safer by allowing users to verify if a taxi is registered before embarking. Using Firebase Messenger this information is forwarded to the selected contacts with real-time location updates ensuring piece of mind to the user while traveling.

**Technologies Used:** Android Studio, JAVA, Google Firebase

**STAND**

**60**

## BSc (Hons) in Business Information Systems



**Jonathan Smith**

**Project Title:** HomeworkHelper?

**LinkedIn:** [www.linkedin.com/in/jonathan-smith-813190103/](https://www.linkedin.com/in/jonathan-smith-813190103/)

Homeworkhelper? Is a primary school web application that helps students solve problems with their homework. It also allows parents and teachers to communicate with each other so both parties can keep informed of students issues.

**Technologies used:** HTML, CSS, MySQL, PHP, Bootstrap, XAMP, Facebook Developer

**STAND**

**82**



**Rolandas Vizbara**

**Project Title:** SSP - Sales Support Platform

**LinkedIn:** [www.linkedin.com/in/rolandasvizbara](https://www.linkedin.com/in/rolandasvizbara)

Sales Support Platform (SSP) - web based platform providing real-time access to sales personnel and their customers. Customers and sales teams will be able to access information from mobile phones, laptops, PC's or tablets.

**Technologies Used:** MySQL, PHP, Bootstrap, Google Maps API, Ajax

**STAND**

**83**



**Ryan Lawler**

**Project Title:** Ryan's Rosters - The generated rostering system

**LinkedIn:** [www.linkedin.com/in/ryan-lawlor/](https://www.linkedin.com/in/ryan-lawlor/)

Ryan's Rosters is a desktop application that enables managers to automatically generate rosters for employees and send the rosters via phone or email. The solution eliminates the need for hard copies of rosters or schedules for managers.

**Technologies Used:** SQL Server, C#, Visual Studio, Angular JS, ASP.net

**STAND**

**22**



**Stuart  
O'Shaughnessy**

**Project Title:** SOS Threat Analytics

**LinkedIn:** [www.linkedin.com/in/stuart-o-shaughnessy](https://www.linkedin.com/in/stuart-o-shaughnessy)

The core focus of this project is Information Security and network traffic analysis. It deals primarily with the extraction and interpretation of Cisco netflow data. The goal is to deliver a modern application that alerts network administrators to potential security breaches and cyber threats through dynamic netflow analysis.

**Technologies Used:** SQL Server, Azure, C#, JAVA, ASP.net, Apache Sparc

**STAND**  
**23**



**Arlon Moleka**

**Project Title:** Prepaid Card Complaints: Sentiment Analysis

**LinkedIn:** [www.linkedin.com/in/arlonmoleka/](https://www.linkedin.com/in/arlonmoleka/)

Performing sentiment analysis on Consumer Financial Protection Bureau. The system extracts data from unstructured elements and automatically interprets the banking complaints data on the prepaid cards, then uses the extracted data to identify if the complaint is likely to be upheld or rejected.

**Technologies Used:** Excel, R, SPSS

**STAND**  
**20**



**Shauna Drumm**

**Project Title:** Hungry for Sport – never miss a minute again, skip the long queues

**LinkedIn:** [www.linkedin.com/in/shaunadrumm](https://www.linkedin.com/in/shaunadrumm)

Planmyevent.eu is a web application that provides an online service for booking venues in Ireland. Customers can search, book and review venues. Venue owners can create and maintain their venue profile and view booking statistics.

**Technologies Used:** HTML, CSS, Javascript, MySQL, PHP, Bootstrap, XAMP, JSON

**STAND**  
**11**

## BSc (Hons) Business and Technology Management (Business Analysis)



**Aidan Doyle**

**Project Title:** Medella App-Control your personal health information

**LinkedIn:** [www.linkedin.com/in/aidan-doyle-7b6057129/](https://www.linkedin.com/in/aidan-doyle-7b6057129/)

Medella is a mobile and web app that stores personal health information for users as the primary function. The USP of the app is that it allows users to have greater control of their personal health information. This will be developed using a detailed requirement specification document. The requirements for the document have been gathered using various requirement elicitation techniques.

**Technologies Used:** HTML, Javascript, Bootstrap, IEEE Papers, Wordpress, MS Project, Google Forms

**STAND**  
**16**



**Alexander McGovern**

**Project Title:** Requirements specification for an online expense system

**STAND**

**17**

**LinkedIn:** [www.linkedin.com/in/alex-mcgovern-15917813b/](https://www.linkedin.com/in/alex-mcgovern-15917813b/)

Used an IEEE requirements specification to elicit requirements for an online expense claiming system for lecturers expenses. Different elicitation techniques were used such as interviews, surveys and focus groups to ensure that the right functional requirements were included for the client.

**Technologies Used:** HTML, Javascript, MS Access, IEEE Papers, Wordpress, MS Project, Google Forms



**Aoife Lynam**

**Project Title:** Communications App

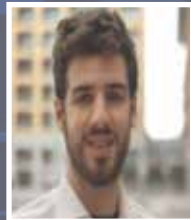
**STAND**

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**LinkedIn:** [www.linkedin.com/in/aoifemlynam/](https://www.linkedin.com/in/aoifemlynam/)

Developed an IEEE requirements specification for retail business to enhance employee engagement. It allows managers to communicate targeted information to staff in realtime, regarding rosters, payslips, contracts, live chats, announcements and emails including push notifications.

**Technologies Used:** MySQL, Bootstrap, Excel, IEEE Papers, Wordpress, MS Project, Google Forms



**Conal Moore**

**Project Title:** Carpool Services - requirements specification for a new Carpooling app.

**STAND**

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**LinkedIn:** [www.linkedin.com/in/conall-moore-240839138/](https://www.linkedin.com/in/conall-moore-240839138/)

Carpool Services is a mobile app which will enable users to log in, carpool and arrange destinations. Developed an IEEE requirements specification document for the development of Carpool Services using business analysis techniques to gather requirements from stakeholders.

**Technologies used:** Excel, Microsoft Office, Wordpress, MS Project, Google Forms



**Daire Byrne**

**Project Title:** MyNCI- Student Information Tool

**STAND**

**47**

**LinkedIn:** [www.linkedin.com/in/daire-byrne](https://www.linkedin.com/in/daire-byrne)

Created an IEEE requirement specification document through a series of elicitation techniques for MyNCI. This mobile app provides students with access to relevant features that are necessary for day to day college life such as timetables, students union and clubs and societies.

**Technologies Used:** HTML, Javascript, IEEE Papers, Wordpress, MS Project, Google Forms





**James Balfe**

**Project Title:** KeepSafeOnline: Online Safety

**LinkedIn:** [www.linkedin.com/in/james-balfe-18972983/](https://www.linkedin.com/in/james-balfe-18972983/)

This project involves the gathering of information using a variety of business analysis elicitation techniques from stakeholders to be used in the development of a website [keeptosecondline.ie](https://www.keeptosecondline.ie). This website's main goal is to educate the public about keeping safe online. The IEEE standard was followed to conduct and complete this project.

**Technologies Used:** HTML, Javascript, Bootstrap, IEEE Papers, Wordpress, MS Project, Google Forms

**STAND**

**48**



**Michael Wall**

**Project Title:** E-Receipt and Product Recall Notification System Requirements

**LinkedIn:** [www.linkedin.com/in/michaelwa11/](https://www.linkedin.com/in/michaelwa11/)

Gathered the requirements from stakeholders using BABOK elicitation techniques to develop an IEEE requirements specification document for an EPOS system and mobile application that will enhance value from retail transactions.

**Technologies Used:** HTML, PHP, IEEE Papers, Wordpress, MS Project

**STAND**

**50**



**Olaoluwa Esho**

**Project Title:** TrackIt - Mobile Application

**LinkedIn:** [www.linkedin.com/mynetwork/4](https://www.linkedin.com/mynetwork/4)

Developed an IEEE requirements specification document for my TrackIt mobile application using information obtained from a number of elicitation techniques. The main functionality is to provide the user with information about the movie or TV show. This app uses audio and facial recognition software to retrieve data from the database such as cast names.

**Technologies Used:** HTML, MySQL, IEEE Papers, Wordpress, Google Forms

**STAND**

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**Robert Farrell**

**Project Title:** Interactive Audio-Visual Unit

**LinkedIn:** [www.linkedin.com/in/robert-farrell-](https://www.linkedin.com/in/robert-farrell-)

This project is an audio visual hardware unit designed to sync lighting and video features to music for use in a nightclub setting. The idea is to give more flexibility to the user, and create a more interactive experience.

**Technologies Used:** Bootstrap, Excel, IEEE Papers, Wordpress, MS Project

**STAND**

**119**



**Tom Howard**

**Project Title:** Rentie - Student accommodation application

**LinkedIn:** [www.linkedin.com/in/tom-howardd](https://www.linkedin.com/in/tom-howardd)

This project is focused on gathering relevant information using elicitation techniques which will be added in the final IEEE specification template for my client and their proposed application. Rentie is an application used to list and book accommodation, whether you're a home owner looking to rent out a spare room or a student looking for accommodation.

**Technologies Used:** HTML, IEEE Papers, JAVA, Wordpress, Google Forms

**STAND**

**52**

## BSc (Hons) Business and Technology Management (Data Analytics)



**Luke Chamberlain**

**Project Title:** Assessing Golfer Performance on the PGA Tour

**LinkedIn:** [www.linkedin.com/in/chamberlainluke](https://www.linkedin.com/in/chamberlainluke)

A predictive statistical analysis exploring the performance of golfers on the PGA tour. Using various data analysis techniques to predict trends and patterns of individual golfers, the results will measure the key aspects of success for the golfers and help to improve their game.

**Technologies Used:** MySQL, Data Analysis Toolpak for Excel, R, SPSS Statistics, Weka

**STAND**

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JOHN LACORRE