National College of Ireland

NATIONAL COLLEGE OF IRELAND

PROJECT SHOWCASE

SCHOOL OF COMPUTING

FINAL YEAR STUDENT PROFILES

22ND MAY 2019

TIME

11.00am -12.30pm: Viewing of the Project Showcase

12.30pm - 1.00pm: Prize giving ceremony with keynote address from Citi

KTI
Knowledge Transfer Ireland
Where Research & Business Connect

CONTENTS

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, marking the transition from their undergraduate degrees to their professional careers.

The School of Computing is also marking another milestone as we are celebrating 21 years in education. During these years we have established ourselves as a global hub of excellence for teaching and research in both traditional and emerging areas (Data Analytics, Machine Learning, Cyber Security, Cloud Computing, Fin-Tech). We aim to continue to develop and expand our programme offerings and ensure that our graduates are ready for the work place, competing against the best IT Graduates nationally and internationally.

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 endeavour 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 Wednesday 22nd May to meet our students' and academic programme team from 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. 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 and 2018.

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.

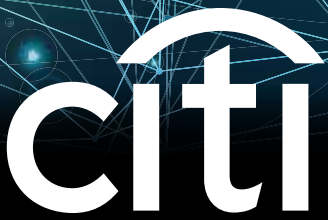
Career fairs, college-based speed networking events, mock interviews, insight sessions, guest lectures, mentoring programs and employer information sessions link employers to students — while giving students direct access to internships, part-time and summer jobs, and full-time employment.

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



Citi is one of the world's leading banks. Our mission is to serve as a trusted advisor to our clients by responsibly providing financial services that enable growth and economic progress. For more than 200 years, Citi has applied its ingenuity, experience and reach to help clients around the world overcome their toughest challenges and harness opportunities to turn ambitions into achievements.

A key part of our role is to imagine what that future will look like so we can help our clients prepare for it. The pace of change is accelerating, which makes this task more difficult. At Citi, we don't view innovation as a destination, but as a journey that offers countless opportunities to improve and excel.

At Citi, we are always on the lookout for the best talent to join our technology teams. We currently have over 500 technologists in our offices in Dublin. We are growing our teams all the time. We love to hear from recent or upcoming graduates who want to build a career in software development. Our graduate programme commences in September with a two year structured programme that includes rotations across different teams and technologies.

Due to the variety of the products and businesses in Citi Ireland, we can offer graduates a world of opportunities. We encourage internal mobility, and learning and development. Applications are currently open for September 2019. To apply to Citi's Graduate programme, please see **oncampus.citi.com**

We are delighted to be a sponsor of the NCI School of Computing's Project Showcase – we would like to commend all the students for the work they have done on their projects. These students are the next generation of innovation and entrepreneurship and we are excited to see what they will achieve as they move into professional careers.

BSC (HONS) IN COMPUTING (INTERNET OF THINGS)

JAMES CURRAN

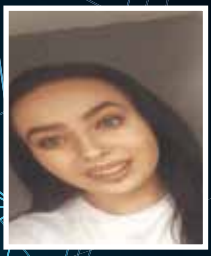
Project Title: Guide

LinkedIn: www.linkedin.com/in/james-a-curran

STAND 75

Guide is a Google Chrome extension that sits between the website and user and attempts to help users with poor technical skills, to browse the internet with a greater degree of ease by providing a uniform interface and consistent response. Site owners can set up custom help and view charts and reports based on user interaction on their site.

Technologies Used: Javascript, Google Firebase, Firebase Authentication,



HANNAH MULLIGAN

Project Title: Sleep Lab - sleep monitor

LinkedIn: www.linkedin.com/in/hannahmulligan

STAND 103

Sleep Lab is an IoT system for monitoring a users sleeping environment. Using a Raspberry Pi and Grove Pi sensors to monitor Room Temperature/ Humidity, Motion, Sound, Noise and Light from within the users sleeping environment. All data recorded through the sensors will be stored in a database on Google Firebase and displayed in the android application for the user to interpret.

Technologies used: Android Studio, Java, Python, Google Firebase, Linux, Raspberry Pi, XML, Grovepi+

JACK BOURKE -MCKENNA

Project Title: OpenGun.Ai

LinkedIn: www.linkedin.com/in/jackbourkemckenna

STAND 17

OpenGun is an active monitoring system that detects firearms in public settings. Through the use of computer vision and machine learning the system will recognise firearms within a video feed and notify relevant authorities. The application aims to monitor presence of firearms in public places and reduce risk of shootings as authorities will be notified immediately.

Technologies used: MySQL, PHP, AWS, Python, Raspberry Pi 3, OpenCV

FEARGHAL MCMORROW

Project Title: Scriba Learning App

LinkedIn: www.linkedin.com/in/fearghal-mc-morrow

STAND 24

Scriba Learning app is an Android app which aims to help people improve their motor skills with the use of the Scriba Stylus. The app has two game activities that are designed to help the user train their hand motor skills, and details/scores can be sent to a professional who can verify the progress made.

Technologies used: Android Studio, Java

SIIM SALU

Project Title: Digital Saver

LinkedIn: www.linkedin.com/in/siim-salu1

STAND 26

Digital Saver is a pre-programmed, IoT based piggy bank that continues to save even if the user wants to spend. Digital Saver securely collects, stores cash inserted and opens locks only at times defined by the master of the device. Digital Saver is ideal to teach children the importance of saving!

Technologies used: Firebase Authentication, Javascript, Python, Java JDK8

MAURICE RAMSBOTTOM

Project Title: StarPi - Night Sky Analyser

LinkedIn: www.linkedin.com/in/maurice-ramsbottom

STAND 27

Telescope aided Rapsberry Pi based application to analyse the night sky by tracing constellations. A machine learning feature will aid the user to identify known planetary bodies, stellar phenomena using Sloan Digital Sky Survey and online Astrophotography resources. Future development will include a mobile application

Technologies Used: HTML, CSS, Javascript, MySQL, PHP, Bootstrap, Laravel, Jquery

ANJIT BARAL

Project Title: Home Appliances Automation System

LinkedIn: www.linkedin.com/in/anjitbaral/

STAND 93

Home Appliances Automation System: This system controls home appliances via android mobile application. Home electronics like light, fan, cooler, heater will be connected to Internet and the sensors of Raspberry Pi inside the home. All real-time data from the sensors is stored in Firebase and sent back to application.

Technologies used: Android Studio, Java, Python, Google Firebase, Raspberry Pi 3

JULIAN ALWANDY

Project Title: Voice Transcript Hub

LinkedIn: www.linkedin.com/in/julianalwandy/

STAND 96

Voice Transcript Hub uses a small device that can be carried by the user, which is used to record conversations and stores them in the cloud. It also provides a speech to text converter giving the user instant access to the recorded transcript.

Technologies Used: HTML, Javascript, Azure, Python, Watson, Raspberry Pi, Angular 2, Golang

VJERAN NAGY

Project Title: Streets of Dublin, 3 AM

LinkedIn: www.linkedin.com/in/vjerannagy

STAND 37

Streets of Dublin, 3 AM is a 2D Beat'em'up/Platformer video game built and powered by Unity Engine 2D technology. The player will be controlling an anthropomorphic hero and battling crime on the streets. What makes this project special is the setting and the nostalgic sentiment it's based on.

Technologies Used: Unity, C#, Visual Studio, U Audacity, Photoshop

PAUL KINSELLA

Project Title: BabyMate - Advanced Monitoring System

LinkedIn: www.linkedin.com/in/kinsellapaul/

STAND 76

BabyMate is a two part system designed to help parents/guardians monitor an infant while they sleep, using a combination of software and hardware. This system will alert parents when the infant wakes or when there are environmental changes that could impact on the infant's sleep. This data is tracked and graphed over time to help the parent/guardian control the infant's sleeping environment.

Technologies Used: Android Studio, Java, Python, Google Firebase, Linux, JSON, XML, Grovepi+

DARREN QUINN

Project Title: Lifestyle Tracker: Mental Health Assistant

LinkedIn: www.linkedin.com/in/darren-quinn

STAND 77

Lifestyle tracker is a mobile application with a focus on tracking user's activity in a diary format. The information is based around the person's lifestyle and aims to help find trends in the user's daily lives and how that correlates towards the user's mental state. The goal of this project is to show the activities that improve the user's mental health.

Technologies Used: Android Studio, Java, Google Firebase, JSON

JORDAN MAY

Project Title: PiParking - A Car Park Management System

LinkedIn: www.linkedin.com/in/mayjordan

STAND 14

Available on Android, PiParking is a complete car parking management system to make finding a car parking space easier. Using computer vision, the user is updated on the number of car parking spaces available and also allows them to book a parking space. The app provides analytical information for the user about the car park availability.

Technologies used: Android Studio, Python, Google Firebase, Raspberry Pi 3, OpenCV

CHRISTOPHER KAMBAYI

Project Title: Ecos - Smart plant grower

STAND 94

LinkedIn: www.linkedin.com/in/christopherkambayi

Ecos is an IoT plant monitoring system used to accurately monitor and water plants in the crucial early stages of life. Ecos monitors the environment in real-time, relaying data such as temperature, moisture and light levels. Ecos periodically takes photos to accurately gauge the growth. Plant watering can be achieved automatically by the system or manually by the user.

Technologies Used: SQL Server, MySQL, Android Studio, AWS, Java, Python, Google Firebase, Grovepi+ Maps API, Heroku

SHANE RYAN

Project Title: Smart Feeder - Smart Pet Feeder

STAND 86

LinkedIn: www.linkedin.com/in/Shane-T-Ryan

Smart Feeder is an IoT enabled programmable automatic pet feeder packed with many features. Users can program a feeding schedule for their pets using the accompanying android app. The system uses the Raspberry Pi's peripheral camera and pet recognition software to alert the user to the pets presence and allows live streaming of pets movements.

Technologies used: Android Studio, Java, Python, Google Firebase, Raspberry Pi 3, JSON, OpenCV

ADAM ROWE

Project Title: Smart Fire Alarm System

STAND 85

LinkedIn: www.linkedin.com/in/adam-rowe-

The Smart Fire Alarm System is a group of sensors working together in order to detect smoke and fire. Using a Raspberry Pi and sensors like temperature, gas sensor for presence of Co2 and a camera to detect flames, data is collected and sent to a compatible Android Studio application which monitors the current status and alerts the user in the event of a fire.

Technologies used: Android Studio, Java, Python, Raspberry Pi 3, OpenCV

VALERIU OLARIU

Project Title: CatID - Cat Breed AI Information System

STAND 97

LinkedIn: www.linkedin.com/in/valeriu-olariu/

CatID is an application that will tell you everything you want to know about your Cat breed, by simply taking or uploading a photo from your android phone. This is achieved by using advanced Machine Learning with Visual Analysis in order to get the most accurate information in the fastest way. The AI is developed and trained to recognise hundreds of cat breeds and give accurate advice about health, diet, etc.

Technologies Used: Android Studio, JAVA, Google Firebase, Google Cloud Vision

BERNARD MCCLUSKEY

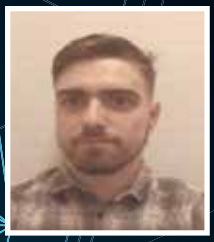
Project Title: IoT Doorbell

LinkedIn: www.linkedin.com/in/bernardmccluskey

STAND 11

IOT Doorbell is a system that alerts the owner via mobile. The notification includes an image which is taken by the Raspberry Pi camera so the owner is aware who is at the door. The home owner has the option to unlock the door to allow the visitor to enter or start a live stream via the Pi camera.

Technologies used: Android Studio, Python, Raspberry Pi 3, Amazon Web Services, PushBullet, Exoplayer



LUKE CAPTAIN

Project Title: MagicMirror

LinkedIn: www.linkedin.com/in/luke-captain

STAND 66

The MagicMirror is a IOT home hub intergrated into a mirror. The goal behind this project is to create a luxury home hub that will allow family members to have a useful and stylish place to check for notes from other family members as well as the weather and other useful information. This product should appeal to all tech enthusiasts.

Technologies used: Python, Google Firebase, Node.js, Electron, Flask, TypeScript, Angular 7

AREZKI IBSAINE

Project Title: Safe Parenting: Home Security System

LinkedIn: **www.linkedin.com/in/arezki-ibsaine**

STAND 57

Safe Parenting is an application allowing families to keep in touch with their parents to ensure that if something bad happens, they will receive an immediate notification. It checks who is at the front and the back door using facial recognition. Google Assistant is installed within the system to assist the parents with their daily tasks, make calls, remember things, and set on and off the system. Events are sent to Google Analytics for analysis. A mobile application shows realtime feed from the camera.

Technologies used: Android Studio, Java, Python, Google Firebase, JSON, OpenCV

JAN KOWAL

Project Title: Caramel

LinkedIn: www.linkedin.com/in/jankowal

STAND 55

A WebAudio API synthesizer that is running on Raspberry PI and allows the user to modulate the sound, saving and loading presets by it's rich GUI. It uses a MIDI keyboard and touchscreen for user interaction. The final product is a standalone musical instrument.

Technologies used: Javascript, Node.js, Raspberry Pi 3, SQLite, Sass, React.js

DAVID MATHER

Project Title: MyFridge - A Smart Fridge System

STAND 4

LinkedIn: www.linkedin.com/in/davidmather96/

MyFridge is a Smart Fridge system that enables users to keep track of items being added to or removed from their Fridge. Users can update the list of items in their Fridge using their voice and an IoT Amazon Echo Device. An Android App provides users with features such as nutritional information and recipe suggestions based on the contents of their Fridge.

Technologies Used: Android Studio, Java, Node.js, JSON, Amazon Web Services

SEAN BARRETT

Project Title: RoomPal - Room Companion System

STAND 19

LinkedIn: www.linkedin.com/in/sean-barrett95

RoomPal uses a Raspberry Pi and connected attachments including environmental sensors, a camera and LED screen to detect and manage environmental changes in a room. Using information from these sources and third part API's, data is displayed, analysed and realtime feedback provided direct to an Android application and LED Screen

Technologies Used: Android Studio, Python, Google Firebase, Node.js, Raspberry Pi 3, JSON

GRAEME DOHERTY

Project Title: EZ-Entry - Smart Door

STAND 5

LinkedIn: www.linkedin.com/in/graemedoherty/

EZ-Entry is an IOT system that allows keyless entry to one's home using facial recognition or through the accompanying Android mobile application. The application also provides notifications and live images from the smart door when a face or faces are detected.

Technologies Used: Android Studio, Firebase, Java, Python, Raspberry Pi 3, OpenCV

CURTIS BOYLAN

Project Title: GrabNGo: Cashier-less Store Technology

STAND 12

LinkedIn: www.linkedin.com/in/curtis-boylan/

GrabNGo is a solution for stores to be able to provide a way of shopping inside a store without having to visit a shop assistant, this will reduce costs and increase profitability. GrabNGo makes use of a simple app along with an IoT powered basket. This will allow the user to be able to pay for their shopping simply using their mobile devices while also providing analytics to the store.

Technologies used: Javascript, MySQL, PHP, Xcode, JSON, iBeacon, Arduino, Stripe API, Objective C

AARON CLEAR

Project Title: Home Security System

LinkedIn: www.linkedin.com/in/aaron-clear

STAND 78

Home Security System comprises of a passive Infrared motion sensor, a camera, a buzzer and a light, all mounted on a Raspberry Pi. An email is sent to the user's mobile phone when an intruder is detected. The Raspberry Pi turns on a light and a buzzer, both of which can be turned off by the user through the application.

Technologies used: Android Studio, Java, Python, Raspberry Pi 3, Bash

VLADISLAVS VASILJEVS

Project Title: PCHub - Computer Monitoring & Control System

LinkedIn: www.linkedin.com/in/vladvasiljev

STAND 51

PCHub is an Android application, which aims to prevent thermal throttling and potential hardware failure in a computer system. PCHub accomplishes this by providing alert notifications and real-time temperature readings from computer components. Extra functionalities include control of LED lights, fan control, visualization of historical data and the ability to switch on & off the computer system.

Technologies Used: Javascript, Android Studio, Python, Google Firebase, Open Hardware Monitor

PATRICK BRENNAN

Project Title: Book Scanner

LinkedIn: www.linkedin.com/in/patrickbrennan1997

STAND 58

An IOT device that uses the OpenCV library to scan book's barcodes and uses the data in the Google Book API to grab information for the scanned books. The information is consumed by an Android Studio application that will display the list of books. Clicking on a book provides additional information and references to similar books.

Technologies used: Android Studio, Google Firebase, Google Books API

DONAL D'SILVA

Project Title: Shop Keep

LinkedIn: www.linkedin.com/in/donyd

STAND 46

An Android app that captures prices from labelling and creates a running total.It will also create shopping lists of recommended items based on estimated usage or based on the frequency of reordering. It compiles product information that allows cross checking of products and prices from different stores.

Technologies Used: Android Studio, Java, Google Firebase, SQLite, Google Cloud Vision, ABBYY

DANIEL DEVINE

Project Title: Spirobot

STAND 106

LinkedIn: www.linkedin.com/in/danieldevine1

Spirobot is an autonomous security drone for home monitoring and surveillance. It has a hexapod chassis for stability purpose and is powered by a Raspberry PI Zero. The drone will automatically patrol an area relaying sensor and video back to the user via a web browser and also be able to be remotely controlled.

Technologies Used: Javascript, PHP, AWS, Python, Raspberry Pi, JSON, Sass

BSC (HONS) IN COMPUTING (DATA ANALYTICS)

MICHAEL DUNNE

Project Title: Secure Event

STAND 73

LinkedIn: www.linkedin.com/in/michaeldunne3/

The aim of this project is to perform sentiment analysis on tweets related to an upcoming event and provide security companies and law enforcement with a detailed analysis, visually displaying potential threats and the overall crowd attitude. This project is an interactive application allowing security to search keywords and is deployed with R shiny.

Technologies used: MySQL, Excel, Python, R, R Shiny, Rstudio

KEITH HUI

Project Title: Auto Nagios

STAND 50

LinkedIn: www.linkedin.com/in/keith-hui12

Auto Nagios is a system that monitors virtual servers within its network. The unique feature of the system is that it automatically resolves disk space issues within the servers by removing caches, logs, etc. While taking into account the meta data of the files and when it was last edited or accessed, the system prevents the deletion of files currently in use.

Technologies Used: MySQL, Python, Amazon Web Services, Nagios

PETER FINEGAN

Project Title: Analysis of Chelsea Football Club Loan System for Youth Players

STAND 74

LinkedIn: www.linkedin.com/in/peter-finegan/

Analysing Chelsea Football Club's Loan System, and its controversial effects of youth players. Using the youth player' on-field statistics, as well as market value gathered from transfermarkt.com, to determine the effects of the loan system and the future footballing career of certain players using R and Predictive Algorithms. The results are displayed in Tableau.

Technologies used: MySQL, Excel, Python, R, Tableau

ZAK O'LEARY

Project Title: MyLocation - Dublin Housing Analysis.

LinkedIn: www.linkedin.com/in/zakoleary/

STAND 79

MyLocation is an analysis of the housing market crisis in the greater Dublin area. Examined the external factors that influence the rise and fall of housing prices using regression modeling. Through the use of neural networks, myLocation creates a predictive model to detemine future house prices within the Dublin area.

Technologies used: MySQL, Excel, Python, R, SPSS, Google Maps API, Rstudio

CONAL GLYNNMARTIN

Project Title: Beat the Bookie

LinkedIn: www.linkedin.com/in/conal-glynnmartin

STAND 49

Beat the Bookie creates reliable betting tips in multiple markets such as Over/Under goals and both teams to score for the English Premier League. By analysing past results to identify trends, this will predict outcomes of a game in order to create access to free tips for punters.

Technologies used: Excel, Python, R, R Shiny, Rstudio

ALEXANDER LOUGHREY

Project Title: Student College Guide

LinkedIn: www.linkedin.com/in/alex-loughrey

STAND 48

Student College Guide is a combination of a data driven Web Application and a collection of statistical methods that have been designed to aid potential third level students in determining which college or course may suit them in terms of their personality and interests. The user is required to carry out a survey and will receive relevant data about colleges and degrees, basedon their answers.

Technologies Used: HTML, CSS, MySQL, Java, R, Tableau, Rstudio

CIARAN KELLY

Project Title: Ciaráns Ferries Business Management Solution

STAND 52

LinkedIn: www.linkedin.com/in/ciarankelly3d/

This project will deliver a full business management solution for Ciaráns Ferries to allow customers create fictional bookings via a website, and allow staff to manage the day to day running of the business via a bespoke CRM. The Company's Management staff are able to analyse all company data quickly via a bespoke .net data application.

Technologies Used: Javascript, SQL Server, Visual Studio .NET, Bootstrap, C#, GitSCM, R, Ms Dynamics

LEONARDO AMANCIO

Project Title: Exploration of Primary School Children with Special Needs in Ireland

STAND 95

LinkedIn: www.linkedin.com/in/leonardoaml

This project aims to show the statistical results of the research carried out on the "Exploration of Primary School Children with Special Needs in Ireland" and provides insights on the information extracted from the Department of Education in Ireland.

Technologies Used: HTML, Javascript, Excel, Python, Here API

FRANCESCO BRUGNERA

Project Title: GymBuddy - Gym Management Application

STAND 45

LinkedIn: www.linkedin.com/in/francesco-brugnera

GymBuddy is a gym management application. At its core it allows its users to purchase a variety of lessons by adding them to a shopping cart. The aim of GymBuddy is to offer the ability to integrate data from a wearable device into a personal page that can be used to monitor fitness progress and at the same time manage a schedule of lessons.

Technologies Used: HTML, C#, ASP.net, jQuery

KEVIN CARMODY

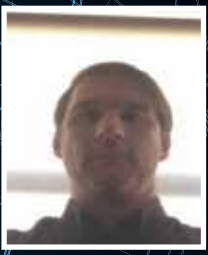
Project Title: The Value of Footballers

STAND 3

LinkedIn: www.linkedin.com/in/carmodykevin/

Analysing Market Value of Footballers in the Championship in England by using data scraped from FCTables.com and Transfermarkt.com. The database will include information on how many goals footballers scored, assists, yellow cards, red cards, chance created and their market value. Using algorithms to predict the future market value of footballers in the coming year. Tableau and IBM SPSS is used to visualise the analysed data.

Technologies Used: Excel, Data Analysis Toolpak for Excel, Python, Tableau, Rstudio



SIMON YOUNG

Project Title: Informare: An online information management application

STAND 10

LinkedIn: www.linkedin.com/in/simon-young

Informare is a user friendly and easy to access online information management application that provides an effective way for local football clubs to create and manage information. The application offers members of the club at all levels, a host of real-time and dynamic features to aid with the dissemination of information.

Technologies used: HTML, CSS, Javascript, MySQL, PHP, Bootstrap, jQuery

COLIN ALLEN

Project Title: Rentlytics: An analysis of the Dublin Rental Market

STAND 2

LinkedIn: **www.linkedin.com/in/colinfallen**

Developing a model to analyse and predict the Dublin rental market using multiple datasets combined with machine learning techniques. Sourced from Daft.ie, the data was used to build a model to accurately predict rental costs based on factors such as location, proximity to public transport and amenities.

Technologies used: MySQL, Python, R, Google Maps API, R Shiny, Rstudio

GEMMA O'CONNOR

Project Title: Tourist Trail

STAND 110

LinkedIn: www.linkedin.com/in/gemoconnor

TouristTrail analyses statistics of the Irish tourism industry, in particular, visitor numbers. The results are presented in a visually attractive and user-friendly format. The aim is to answer pertinent questions and provide a useful tool for tourists booking trips and and businesses planning for the future of the industry.

Technologies used: Excel, R, SPSS Statistics, Tableau, Weka

KEVIN LANGAN

Project Title: NFL Concussion Predictor

STAND 23

LinkedIn: www.linkedin.com/in/kevinlangan98

NFL Concussion Predictor is a data analytics project analysing player concussion injuries in the NFL from previous and current NFL seasons. The study explores the patterns of concussion injuries and predicts if the number of concussion injuries will increase or decrease in future NFL seasons. The predictions are carried out through data and web mining techniques and data analytics tests.

Technologies Used: Excel, Python, R, Tableau, MapReduce, Rstudio

FINN HOULIHAN

Project Title: Andband - Connecting Musicians

STAND 42

LinkedIn: www.linkedin.com/in/finn-houlihan

Andband provides a way for musicians to connect with each other so they can start musical projects. The application implements a modular microservices architecture, with multiple services that can be used independently. It also makes use of modern, industry-standard frameworks such as Spring Boot, Cloud, Angular and OAuth2, and runs on AWS with reliable S3 storage.

Technologies Used: Gradle, OAuth2, Hibernate JPA, Spring Boot, Spring Cloud, Angular 7

KARINA JERUSALMI

Project Title: Clustering and Prediction of Customer Behaviour Patterns in Moby-DickTelecommunication Company

STAND 35

LinkedIn: www.linkedin.com/in/kjeru

This project aims to provide Moby-Dick telecoms company with the information necessary to reduce customer churn. Clustering models provide the company insights on customers' behaviour and patterns, predictive models contribute in the planning of future marketing and sales strategy, and an insights' dashboard allows for easy visual interpretation of all the analysis generated.

Technologies used: Python, R, Hadoop

AILIS CURRAN

Project Title: Analyzing Car Parking Spaces

STAND 1

LinkedIn: www.linkedin.com/in/ailis-curran97/

This project will measure and analyse the car parking spaces in Dublin City. Data will be gathered at different intervals throughout the day, over a period of time. This data will show parking trends, availability of car parking spaces and the busiest days for cars in the city centre. Comparing project data with data available from Dublin City Council to help establish parking trends in the city.

Technologies used: Excel, AWS, Python, Tableau, XML, Rstudio

ALEXANDER MILLEA

Project Title: Irish Suicide Analysis

STAND 36

LinkedIn: www.linkedin.com/in/alexmillea

Extracted, transformed and analysed Irish suicide statistics from both the Central Statistics Office (CSO) and Pieta House to identify significant trends. Investigating the suicide count within several categorical factors (gender, age, county), the project aims to identify if significant economic events have contributed to the overall suicide statistics.

Technologies used: R, RStudio, R Shiny, Excel

RICHARD MC DYER

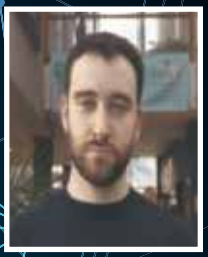
Project Title: Crypto Currency Analysis

LinkedIn: www.linkedin.com/in/richard-mcdyer1997

STAND 89

Crypto Currencies have become one of the most talked about technologies in the past ten years and its share price is extremely volatile. Using different types of predictive and descriptive data mining techniques to make a decision on whether to buy, hold or sell Bitcoin, Ethereum and Ripple. The output of the statistical tests will be displayed in R Shiny.

Technologies used: R, R Shiny, Bitcoin, Rstudio



ANDREW TALTY

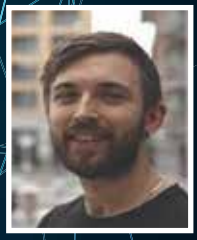
Project Title: NFL Statistical Analysis

LinkedIn: www.linkedin.com/in/andrewtalty

STAND 104

The National Football League (NFL) Statistical Predictor is analysis of NFL team's and player's data taken from the NFL. Past performance and team factors are analysed to forecast a player's future performance. Using methods with machine learning algorithms to evaluate which produces the most accurate outcome e.g. passing yards, rush attempts. Findings will be displayed on the web application framework R Shiny.

Technologies Used: Excel, Python, R, R Shiny, Rstudio



ARTHUR IVANOV

Project Title: EmpRev: Jobs Market Analysis Tool

LinkedIn: www.linkedin.com/in/arthurivanov

STAND 38

EmpRev is a data analytics web application that will analyse the IT jobs market in Ireland. The analysis will involve classifying the job ads into different categories, summarizing the job requirements for each and identify demands in the market. Data is scraped continuously from jobs.ie and irishjobs.ie. The analysis results will be outputted on the EmpRevs website which will be a useful resource for jobseekers.

Technologies Used: HTML, CSS, MySQL, Bootstrap, Python, R, Django, Scikit-Learn

BSC (HONS) IN COMPUTING (SOFTWARE DEVELOPMENT)

MATEUSZ MATUSZCZYK

Project Title: CAMalytics - modern approach to security

LinkedIn: www.linkedin.com/in/mateusz-matuszczyk

STAND 59

CAMalytics is a theft detection system which uses security cameras' footage to perform live video analysis of movements within a monitored area. It utilises specialised software (Tensorflow and Keras API) to facilitate object detection on the live security footage and track the objects of interest. When the tracked object is taken outside it's designated range, the alert is triggered and authorised users are notified via iOS/ Android mobile application.

Technologies Used: MongoDB, Python, Ionic Framework, OpenCV, JAVA Spring Boot

KEVIN REID

Project Title: Syndicatr

LinkedIn: www.linkedin.com/in/kevinreidirl/

STAND 18

Syndicatr is a mobile application that is targeted at lotto syndicates. It allows lottery players to monitor and maintain their lotto syndicate groups. The application notifies players who have yet to pay into their lotto syndicate, removing the need for syndicate managers have to look for payment. Using the in-app wallet, players only have to make sure that they have topped-up.

Technologies used: Android Studio, Java, Google Firebase, SQLite, Stripe API

JUNYING SUN

Project Title: Waitless-Restaurant management system

LinkedIn: www.linkedin.com/in/junyingsun/

STAND 30

Waitless is an application suite to improve the restaurant experience for consumers and restaurant managers. Using QR codes consumers can view the menus, order using the app and pay the bill. Restaurant owners can generate QR codes for tables, create and update menus, manage orders, bills and till reports through an admin web app.

Technologies Used: Java, Node.js, Amazon Web Services, React.js, Stripe API

MAHMAD BASHA

Project Title: Pivo-App

LinkedIn: www.linkedin.com/in/mahamedbasha

STAND 84

Pivo-App is a web application built to improve the engagement between clubs/ Societies and the student's of NCI. Built with RubyonRails framework, the applications lets the clubs/societies to manage and create events and keep members up to date on all the events going on.

Technologies used: RubyonRails, Java|Script,Stripe API

SMAIL MACHICHI

Project Title: SmartDeals

LinkedIn: wwwlinkedin.com/in/smailmachichi

STAND 114

SmartDeals is a web application that provides a platform for the users to buy and sell new and used items online and select items by categories. It also allows open communication between buyers and sellers about the product and price, providing advice for the users.

Technologies Used: HTML, CSS, Javascript, PHP, Bootstrap, MongoDB, jQuery, Basalmiq

EMMA ENGLISH

Project Title: StudySum: Content Summarisation

STAND 15

LinkedIn: www.linkedin.com/in/emma-english

StudySum is an educational web application that allows students to summarise content related to their coursework. It is designed to assist students by condensing content from both online and offline sources. The project employs natural language processing and ontology engineering to analyse the source and to create summaries for the user.

Technologies used: Python, R, Google Firebase, NLTK

PATRICK KELLY

Project Title: HotSpots

STAND 88

LinkedIn: www.linkedin.com/in/patrick-kelly

HotSpots is an android mobile application supported by Google's Firebase platform which allows users to discover and share their favourite places they have visited. Users can connect with one another to give their recommendations of places to see. HotSpots displays the current trending places and allows them to review specific locations to see if it's somewhere they'd wish to go.

Technologies used: Android Studio, Java, Google Firebase, Google Maps API

ROSS DELANEY

Project Title: MySupply - Supply Chain tool with Blockchain

STAND 28

LinkedIn: www.linkedin.com/in/rossdelaney

MySupply is a digital supply chain tool and SaaS product designed using React.js to be used in industry. This application tracks the assets of the user using a blockchain transaction ledger. The user can add different vendors and products to their supply chain. They can then visualise their supply chain and plot delivery routes on a map on the application using the Mapbox API.

Technologies used: Google Firebase, Mapbox API, React.js, Blockchain

SOFFYAN ALI

Project Title: BeFit

STAND 100

LinkedIn: www.linkedin.com/in/soffyanali/

BeFit web application helps users to track and manage their calories intake and provides a diet plan according to their goals and choices. Users can track their heart rate, steps and calories burned through GoogleFit by using a wearable device or phone. A rule-based algorithm has been applied for a recommendation of food items which will benefit users to make the right choices of healthy food

Technologies used: R, MySQL, PHP, Bootstrap, XAMP, JSON, jQuery, Google Fitness API

PAUL BYRNE

Project Title: MediPass - Your Secure Electronic Medical Passport

STAND 61

LinkedIn: www.linkedin.com/in/paulbyrnef/

A centralised cloud-based healthcare system that acts primarily as an emergency alerting system and provides innovative healthcare services. It uses Medikey - a unique, encrypted code stored on the patient's NFC wearable, which will exclusively shared with the healthcare personnel for a more efficient and accurate response. Family relatives will also be notified about such incidents.

Technologies Used: Javascript, MySQL, PHP, AWS, Java, Node.js, NFC

SURENDRA DURA

Project Title: Future Health - Tracking Physical Health

STAND 60

LinkedIn: www.linkedin.com/in/SurendraDura

Future Health is an Android app to track the user's physical activities automatically using TensorFlow, an open source machine learning software. The app will provide a standard plan that the user can follow to increase physical activity. After each week, a report is generated for the user on all exercises taken. Each week, the activities can be compared with previous weeks.

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

SANA DIWAN

Project Title: Upcoming Neighbourhood: Future Potential for Residing in an Area

STAND 99

LinkedIn: www.linkedin.com/in/developer-sanadiwan

Upcoming Neighbourhood is a website where home owners, renters and investors can evaluate their property. It computes predicted rental value, buying price, buying value and upcoming developments for the searched area (such as car parks, bus and luas stops, etc). The user can then view this information in an interactive map and navigate their search results for up to 5years at a time.

Technologies used: Visual Studio .NET, AWS, Python, R

AMY SIGGINS

Project Title: Jump Scan

STAND 62

LinkedIn: www.linkedin.com/in/amysiggins

Jump Scan is a transport mobile application. When a user signs up, they are given a unique QR code. Each QR code allows users to scan onto any mode of public transport. Users can access timetables for all the different modes of transport. Secure top-ups are made through PayPal.

Technologies used: Android Studio, Java, SQLite, XML

CAMELIA FARCAS

Project Title: Smart School Search: Android Application

STAND 54

LinkedIn: www.linkedin.com/in/cameliafarcas

SSS is a mobile application which empowers parents to unlock educational opportunities for their children. The app allows users to filter school searches based on their preferences such as location, fee, gender, activities or sports. The information has been extracted from school's websites and stored on a remote database. The app hosts a blog where parents can write reviews, advise each other and create a strong community.

Technologies Used: Visual Studio, Ionic Framework, TypeScript, Angular 7, Google Firebase

MARK HEFFERNAN

Project Title: Allergy Assistant

STAND 111

LinkedIn: www.linkedin.com/in/mark-heffernan-dev

Allergy Assistant is an Android application designed to aid those affected by allergies. The app will serve as a useful daily tool to ensure food safety by allowing users to scan food barcodes in real time and in emergency situations by helping users seek necessary assistance. Allergy Assistant will take advantage of smartphone capabilities such as GPS, and cameras to provide this service.

Technologies used: Android Studio, Java, Google Firebase, Google Maps API

KATIE BRADY

Project Title: BookItNow - A Movie Information App

STAND 65

LinkedIn: www.linkedin.com/in/katiebrady95

BookItNow is a mobile application that provides users with a one-stop shop for information on upcoming and currently released movies. Users can view times of all local cinemas and book their tickets through the app. They will also be able to view movie synopsis, run time and trailers.

Technologies used: Cloud 9, Node.js, Ionic Framework, Google Maps API, Firebase Authentication

AARON MC CORMACK

Project Title: Selim.io - Personal Music Assistant

STAND 29

LinkedIn: www.linkedin/in/aaronmccormack

Selim.io is a personal music assistant which interprets the user's speech and uses natural language processing to construct the appropriate responses to users regarding their music preferences. The responses contain information on upcoming events in their area, upcoming new releases from all of their favourite artists and recommendations on new artists based on their preferences.

Technologies Used: Python, Linux, Raspberry Pi

CAVIN O'SULLIVAN

Project Title: TrafficAnalysis.io

LinkedIn: www.linkedin.com/in/cavin-o-sullivan

STAND 98

A web-based analytical report to support the theory that text can be mined in order to understand and display traffic delays around Dublin. Using sentiment analysis, the application implements a twitter monitoring system to highlight areas prone to traffic obstructions and allow users to move from point A to B with minimal delays.

Technologies Used: Angular 2+, Python, R Studio, RxJS, MapBox API

BSC (HONS) IN COMPUTING (GAMING & MOBILE)

KAITLYN CANDY

Project Title: Prison Escape: Rockwood Penitentiary

LinkedIn: www.linkedin.com/in/kaitlyncandy/

STAND 83

Prison Escape: Rockwood Penitentiary is a single player virtual reality game in which the objective is to escape from a prison by navigating through a series of different rooms by collecting keys and finding various workarounds, to get out before the prisoner who still resides there finds you. Players play against the clock and the quickest time achieves the highest score. Previous scores are added to a database.

Technologies Used: Unity, Blender, C#, Visual Studio

CILLIAN MURRAY

Project Title: Fictional Adventures

LinkedIn: www.linkedin.com/in/cillianjmurray/

STAND 113

Fictional Adventures is the beginning of a new chapter in the world of Interactive Fiction. Interactive Fiction allows players to make decisions for their character, perform actions of both heroic and villainous ideals and become something more than a gamer. With fiction, the limits to what can be made are only defined by the imagination of the creator. An array of exciting worlds at your fingertips.

Technologies Used: Javascript, Unity, Java

CHENLEI JIE

Project Title: 3D Maze Escape Game

LinkedIn: www.linkedin.com/in/jiechenlei/

STAND 21

3D Maze Escape Game is a combination of various games which is built on the Maze base. It has different maze shapes and levels of difficulty. The player escapes the maze in limited time and receives a score for each level. In order to successfully escape, the player also needs to complete small puzzles or crossword games.

Technologies used: MySQL, Unity, AWS, Blender, C#, Visual Studio

DARIUSZ HANUSZEWICZ

Project Title: Aztec's Gold VR - adventure 3d puzzle game

STAND 34

LinkedIn: www.linkedin.com/in/dariusz-hanuszewicz

Aztec's Gold VR - adventure 3d puzzle - is a PC game developed in Unity and optimised for Oculus Rift. Players will explore mysteries of an ancient Aztec lost city, using their intelligence and observation skills to avoid traps, discover hidden clues, decipher messages, open combination locks and solve the puzzle leading to a burried treasure.

Technologies used: Unity, AutoDesk 3DS Max, C#, Visual Studio, Photoshop, Oculus Rift

ANTHONY MOORE

Project Title: Trapped

STAND 20

LinkedIn: www.linkedin.com/in/anthonymoore91

Trapped is a third person adventure game developed in unity that takes place on a mysterious island. The player must discover how he arrived on the island. He will have to explore the island and collect items in order to reveal cut-scenes that will piece together how the player has ended up there.

Technologies Used: Unity, Blender, C#, Visual Studio, U Audacity

KEVIN HYNES

Project Title: MySafariVR

STAND 87

LinkedIn: www.linkedin.com/in/kthynes

MySafariVR is a game which consists of a simulated environment tailored to virtual reality in which players can watch, interact and learn about animals within the game as if they were on safari. With each animal having its own unique behaviours, the player will learn about each of them and will learn what way to interact with them.

Technologies Used: Unity, AutoDesk 3DS Max, Blender, C#, Visual Studio, Photoshop, Oculus Rift

GAVIN MULVANY

Project Title: EndlessLearner - A casual based game

STAND 108

LinkedIn: www.linkedin.com/in/gavinmulvany

EndlessLearner is a casual-based endless runner game where a player must control a continuously moving character to dodge obstacles, collect unique objects and scoring points. The game comprises of procedurally generated algorithms to maintain large amounts of game content, randomise obstacles and place collectibles unsystematically on the map.

Technologies used: Unity, Blender, C#, Visual Studio, Photoshop

BRIAN DOYLE

Project Title: Card Subject To Change - Visual Novel Game

STAND 67

LinkedIn: www.linkedin.com/in/brian-doyle

Card Subject To Change is a murder-mystery visual novel game with a pro wrestling theme. The narrative of the story is dictated by the choices made by the player throughout the game. During the story the player will find clues and use them to uncover the identity of the murderer.

Technologies Used: Unity, C#, Visual Studio

CONOR SHERIDAN

Project Title: Digital D&D

STAND 56

LinkedIn: www.linkedin.com/in/csheridan1/

Digital D&D is a mobile application to manage the players inventory system in the highly popular Dungeons and Dragons game. The app will allow the players to join a private lobby through firebase and efficiently manage their inventories. The Mobile Application will bring old methods of playing into the Modern Era.

Technologies used: Android Studio, Java, Raspberry Pi 3, Firebase Authentication

DARREN GOUGH

Project Title: Adventure Quest

STAND 68

LinkedIn: www.linkedin.com/in/DarrenMGough

Adventure Quest is a platforming shooter game that can be played alone or with a friend. The player can unlock new weapons by defeating bosses and exploring levels to explore secret paths and find hidden collectables. The player competes in five stages, each with a boss at the end in the single player mode. In the multiplayer mode, a second player can control the enemies to impede the first players progress.

Technologies Used: Unity, Blender, C#, Visual Studio, Photoshop

JONATHAN HARTE

Project Title: The Detective

STAND 9

LinkedIn: www.linkedin.com/in/jonathan-harte

The Detective is a first person based perspective game which combines traditional shooting as well as a puzzle solving element into the game experience. Players must investigate their surroundings to find objects and kill the enemy in order to progress to the next level.

Technologies used: Unity, Blender, C#, Visual Studio, U Audacity

LEANDRO SILVA

Project Title: Krazy Switch: Interactive Card Game

LinkedIn: www.linkedin.com/in/leandrosilva47/

STAND 72

Krazy Switch is a fun and innovative multiplayer card game developed in Unity. The game involves two or more players & their task will be to defeat the dangerous AI opponents, finding numerous ways and different tactics to win the game. The first player to get rid of all the cards will be the winner! The opponents provided in the game were created using Artificial Intelligence..

Technologies used: MySQL, Unity, C#, Visual Studio, Photoshop

FABIANO A DOS SANTOS

Project Title: The Shipwright

LinkedIn: www.linkedin.com/in/fabiano-alberto-dos-santos

STAND 69

The Shipwright is a mobile application that provides a booking management system for a guesthouse. Application includes secure login, service menu, booking special deals and information about the guesthouse. The Shipwright also includes API Geo location and a chat forum. The application has an administrative interface where only staff members are able to delete, add, edit and update deals details.

Technologies used: Android Studio, Java, Firebase Authentication, XML

JAMES O'CARROLL

Project Title: Hunger Heroes Adventures

LinkedIn: www.linkedin.com/in/jamesocarroll

STAND 109

Hunger Heroes Adventures is an educational, 2d platforming game aimed at a young audience to teach them the impacts of food waste, food litter and climate change. Each level in the game will cover these topics with a quiz at the end of each level. The player must collect hints and tips throughout the game to prepare them for the quiz while using unique power-ups.

Technologies Used: Unity, C#, Visual Studio

BSC (HONS) IN COMPUTING (CYBER SECURITY)

DOUGLAS SHEED

Project Title: Secure Your Place

LinkedIn: www.linkedin.com/in/dougsheed

STAND 13

Secure Your Place is the only security training and online awareness platform an individual or company will need. It utilises relevant scenarios and situations as well as detailed information to effectively improve the security and diligence of the end users online presence. This will help mitigate the significant security threat that users often unknowingly facilitate and potentially prevent considerable penalties and data breaches.

Technologies Used: Javascript, SQL Server, Cloud 9, Amazon Web Services, Stripe API, Articulate 360

DZIUGAS GRUSAUSKAS

Project Title: The Unown Trials

STAND 33

LinkedIn: www.linkedin.com/in/dziugasgrus

The Unown Trials is an interactive web application with a focus on cyber security and critical thinking. It is a game that challenges the user to pass various trials by using web exploits, cryptography, steganography and use of critical thinking. The Unown Trials aim to challenge the player whilst also rewarding those who pass. This can be used as an aptitude test for potential recruits in cyber security and as a test for security students.

Technologies used: HTML, CSS, Javascript, MySQL, Visual Studio, XAMP, Photoshop, SilentEye

JORDAN COGAN

Project Title: Ticket Tap

STAND 102

LinkedIn: www.linkedin.com/in/jordan-cogan

An android application that utilizes the androids Near Field Communication feature to securely simplify attendees access to events. Attendees can use their mobile device as a ticket and tap the NFC reader to gain access to the area assigned to their account. Additional access is granted to higher tiered users.

Technologies Used: Android Studio, Java, NFC, Kotlin

EFREN LIMPIN

Project Title: Aditus - Permission History Tool

STAND 8

LinkedIn: www.linkedin.com/in/efrenlimpin

Aditus is an Android application that allows users to view how the permissions for an installed application may change between large updates. In addition, a logging functionality is implemented. This is to record permission changes whenever an installed application is updated to a newer version. The logging data will be stored on a cloud database via Firebase.

Technologies Used: Android Studio, Java, Google Firebase

CIARAN SEAGRAVE

Project Title: Bankr - Digital Money Management

STAND 7

LinkedIn: www.linkedin.com/in/ciaranseagrave

The aim of the Bankr system is to allow people to manage their money more effectively and keep track of expenditures. The user will be able to enter their spending manually using the Bankr website or by uploading their receipts through the Bankr Android app. Google Vision OCR will allow the receipt details to be converted and stored in plain text.

Technologies Used: HTML, Javascript, PHP, Android Studio, Java, Google Cloud Vision

ALEKSANDRS HAHALEVS

Project Title: DEVNULL

LinkedIn: www.linkedin.com/in/aleks-hahalev/

STAND 6

Cyber security awareness is increasingly important for IT students and professionals. Security should be a number 1 concern for any application. DEVNULL is a secure learning tool built for cyber security enthusiasts. Users can develop penetration testing skills and gain an understanding of OWASP TOP 10 vulnerabilities through hacking, forums, tutorials and FAQs.

Technologies used: Javascript, Java, Node.js, React.js

JAMIE BOLAND

Project Title: Datability - Vulnerability Database

LinkedIn: www.linkedin.com/in/jamie-boland

STAND 101

Datability is a secure web application which will highlight different vulnerabilities in web applications, networks, etc. The application will include a database of vulnerabilities which the user can browse and learn about some of the dangers online. The application will also include a small demo on how the vulnerabilities can affect a web application, network etc.

Technologies used: MySQL, PHP, Visual Studio, XAMP, Laravel

DAVID DUNWOODY

Project Title: CSE-Learning App

LinkedIn: www.linkedin.com/in/david-dunwoody

STAND 32

The Cyber Security E-learning application allows users to learn about modules that are included in the BSc Cyber Security stream in NCI, in advance of choosing final year specialisation. The application includes activities such as SQL injection, Cross Site Scripting (XSS) and Ciphers. Users will undertake quizzes and tasks related to cyber security.

Technologies used: CSS, MySQL, PHP, Laravel

SHANNON MITCHELL

Project Title: KinderGuardian - Secure Chat Application

LinkedIn: www.linkedin.com/in/shannonkkmitchell

STAND 82

KinderGuardian is a mobile application which allows children to communicate online in a safe environment. The main functionality of KinderGuardian is a chatroom which has a built in profanity filter (filters inappropriate content). KinderGuardian also provides information and resources on how to keep your children safe online.

Technologies Used: Android Studio, Java, Google Firebase

CONOR WARD

Project Title: My Mental Health-Providing aid to those in need

STAND 71

LinkedIn: www.linkedin.com/in/Conor-J-Ward

A mobile application that provides the user access to mental health support. The application includes a music player to listen to relaxing audio sounds, an online chat to talk to an external source(professional) and a journaling function to allow the user to record their feelings on a daily basis. The application also includes information on support helplines available with a direct call option.

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

GLENN KENNEDY

Project Title: Netscan

STAND 80

LinkedIn: www.linkedin.com/in/glennk010

Netscan is an online web application which is used to enhance the security and integrity of a users web application by scanning for vulnerabilities imported from NMAP and OpenVAS. The application also provides the users with solutions to improve certain aspects of their application as a result of the scan.

Technologies Used: HTML, CSS, PHP, Bootstrap, Cloud 9, OpenVAS, NMAP

DAN NEMTANU

Project Title: GoldenLine: Secure Web Platform

STAND 25

LinkedIn: **www.linkedin.com/in/nemtanu/**

GoldenLine - secure web marketplace allowing users to easily source raw materials, manufacturers, drop-shippers and distributors, everything needed for a successful business. It allows users to buy products efficiently, and businesses to find resources, clients and increase revenue. The users are able to communicate with each other using an implemented messenger. GoldenLine is secured against risks outlined in OWASP.

Technologies used: Bootstrap, Visual Studio, Google Firebase, Angular JS, JSON, Google Maps API

RICHARD ST LAWRENCE

Project Title: Encrypt Me

STAND 81

LinkedIn: www.linkedin.com/in/RichardStLawrence

Encrypt Me is a Web based virus scanner and encryption tool that aids users in securing their files. The Application incorporates an API Virus Scanner which will allow users to scan a file for viruses. Users also have the option to encrypt files using the latest AES-256 standard in cryptography. The application aims to reduce the risk of a data breach within an organization due to a malicious file.

Technologies Used: HTML, CSS, PHP, Java, NetBeans, Python, XML

CHAMAN ALI

Project Title: Medi-Ask

LinkedIn: www.linkedin.com/in/ChamanAli

STAND 31

Medi-Ask is a web forum which allows professionals to respond to user's medical queries. The application includes a private messaging system to allow professionals to communicate with users outside the forum. Registered users and responses will be stored in MySQL database. Users will rate the responses using a like button.

Technologies used: HTML, CSS, Javascript, MySQL, PHP, Bootstrap, Cloud 9, jQuery

BSC HONS IN BUSINESS INFORMATION SYSTEMS

MEAGAN BUTLER

Project Title: Student Voting System

LinkedIn: www.linkedin.com/in/meagan-butler

STAND 92

Developing a Student Voting System which allows students of NCI to vote online for the Student Union Elections when they are unable to be on campus to vote. This application will help the Students Union keep track of all the votes and be able to generate the results of the votes faster for students to view.

Technologies Used: HTML, CSS, Javascript, MySQL, PHP, Bootstrap, Cloud 9, Google Maps API

OLESYA KHASANOVA

Project Title: Find Your Project - Student Application

LinkedIn: www.linkedin.com/in/olesya-dowling-836b4962/

STAND 63

Find Your Project is a web application to help students and colleges to streamline project assignment processes. This automated process will give value in terms of cost and time savings, by eliminating the need for college academics and administrators to manage assignments in an ad-hoc and manual approach. This enables students to view and analyse multiple projects, mark some projects as their favourite and launch the automatic allocation process.

Technologies Used: HTML, CSS, SQL Server, MySQL, PHP, Cloud 9, Apache Sparc

DANIEL HANNIGAN

Project Title: Connect2You

LinkedIn: www.linkedin.com/in/daniel-hannigan

STAND 22

Connect2You is a Mobile Application where Microsoft users log issues and have them resolved by other users. There is also a ticketing system which allows for easy access and quicker responses. With the ability to create a profile, you can use it to interact with other users. The application is developed using Android Studio and stored using Google Firebase through Firebase Authentication.

Technologies Used: Android Studio, Java, Google Firebase, Firebase Authentication, XML

IAN BRACKEN

Project Title: Golf Management System

STAND 91

LinkedIn: www.linkedin.com/in/ian-bracken/

An online web application and smartcard for Golfing Union of Ireland members. Register for competitions and method of payment. The application and smartcard allows users to top-up an account online which can be used nationwide in all golf clubs associated with the Golfing Union of Ireland.

Technologies used: HTML, PHP, Bootstrap, XAMP, jQuery, RFID

DAVID O'CONNOR

Project Title: Premier League Predictor

STAND 90

LinkedIn: www.linkedin.com/in/davidoconnor97

Premier League Predictor is a project which uses data analytic techniques to predict outcomes in the premier league such as table position, top goal scorer and more. Current year and previous year's statistics are used to create an algorithm which will enhance accuracy. Data is web scraped, statistically tested and data mining techniques are used.

Technologies used: SQL Server, Excel, SPSS Statistics, Tableau, Rstudio

SHENGYANG YUAN

Project Title: My Tutor

STAND 70

LinkedIn: www.linkedin.com/in/shengyang-yuan/

A web based application called My Tutor. This application is not only reforming family education but also a bridge to realize effective communication between students and lecturers. For students, this application offers a platform where they can book lectures online, chat with others and review the lecturers. For lecturers, they can select students based on location and courses.

Technologies used: SQL Server, Visual Studio .NET, Bootstrap, Azure, C#, Java, Visual Studio, ASP.net

BSC (HONS) IN TECHNOLOGY MANAGEMENT (BUSINESS ANALYSIS)

MARLIN FERREIRA

Project Title: NCISU Connect - Mobile Application

STAND 105

LinkedIn: www.linkedin.com/in/marlinferreira

This project is focused on gathering relevant information from stakeholders using elicitation techniques to develop an IEEE requirement specification document for a mobile app. NCISU Connect is a mobile application developed to improve communication between SU and students. Students receive notifications to events and services available.

Technologies used: IEEE Papers, Microsoft Office, Wordpress, MS Project, Google Forms, Basalmiq

SEAN BRADY

Project Title: Quick Responder - Emergency Response Application

STAND 47

LinkedIn: www.linkedin.com/in/seanrichardbrady

Developed and gathered requirements for an IEEE specification document for an emergency response application. This app will store the user's medical information and past history and in the event of an emergency situation, the stored information will be sent to the response teams along with the GPS location of the user. This will allow the responders to prepare all necessary medical equipment needed for the use in a fast and efficient manner.

Technologies used: IEEE Papers, Wordpress, MS Project, Google Forms, Basalmiq

JESSICA BANKOLE

Project Title: MedExpress

STAND 107

LinkedIn: www.linkedin.com/in/jessica-bankole

Developed a IEEE requirements specification document using a wide range of business analysis techniques to gather requirements from stakeholders. This medical appointment booking system allows patients access to real time availability and book an appointment. Medical centres benefit from an efficient system which allows patients to pay through the app and alert patients to cancellation appointments.

Technologies used: HTML, CSS, MS Access, Excel, IEEE Papers, Wordpress, MS Project, Google Forms

ADELAIDE NTULI

Project Title: Utility-App: Gas & Electricity top-up mobile app

STAND 16

LinkedIn: www.linkedin.com/in/adelaide-ntuli

Created an IEEE requirement specification document to elicit requirements for developing an app that will serve as a bridge between Utility Providers & Pay As You Go customers. Providing a secure login and safety payment feature, the user can top-up and receive instant or future credit. Audio options available for users with mobility, sensory or visual challenges.

Technologies Used: Android Studio, IEEE Papers, Wordpress, MS Project, Google Forms

STEVEN KAWALA

Project Title: DAMMA: Detect and Alert Messaging Mobile App

STAND 43

LinkedIn: www.linkedin.com/in/steven-kawala

Developed an IEEE requirements specification document to elicit requirements for the Detect and Alert Messaging Mobile App.Authorised users will receive alert messages on their mobile phones when a person living with dementia moves outside the set parameters.This includes a persons' inactivity and instances like falling or missing medication. Caregivers and relatives will be able to monitor scheduled daily activities.

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

JORDAN LEE

Project Title: Supporting Sporting Parents

STAND 41

LinkedIn: www.linkedin.com/in/jordanlee-/

Created an IEEE requirement specification document for an application to assist parents in finding sporting activities for their children using a variety of elicitation techniques. The application allows parents to locate local sports teams, enrol their child, communicate with other parents and find useful information on nutrition and other activities.

Technologies Used: IEEE Papers, Wordpress, MS Project, Google Forms

ANGELA DAREL

Project Title: Med Finder

STAND 39

LinkedIn: www.linkedin.com/in/angeladarel

Developed highly detailed IEEE requirements document for Med Finder application,that will allow for quick and reliable medication search. Requirements were elicited using various methods and presented in the form of a report and graphs. The application will allow users to find country related medication, despite differences in the brand name.

Technologies Used: HTML, CSS, PHP, MS Project, Google Forms, Lucidpress, WIX, DA Toolkit for MS

BSC HONS IN TECHNOLOGY MANAGEMENT (DATA ANALYTICS)

CHARLENE MOORE

Project Title: Analysis of Gun Crime in America

STAND 40

LinkedIn: www.linkedin.com/in/charlene-moore

"America stands alone among developed countries with their gun control". This project focused on multiple datasets, determining links, trends and patterns relating to America's gun crime. Machine Learning techniques were used to build a model to predict future trends, factoring variables such as the nature of the crime, the location and the time the crime occurred.

Technologies used: Excel, Data Analysis Toolpak for Excel, R, SPSS, Tableau, Rstudio

TRISTAN BALITA

Project Title: Touchdown - A Detailed and Predictive Analysis on NFL

STAND 44

LinkedIn: www.linkedin.com/in/balitatristan

Touchdown is a data analytics project that analyses data on the National Football League. Rstudio is used for the development of the machine learning algorithms that are used to accurately make predictions on the future performance of both team and player based on previous recorded match data and player statistics. Used Tableau to visually interpret the results and allow users to interact with the analysis.

Technologies used: Data Analysis Toolpak for Excel, R, SPSS, Tableau, Wordpress, R Shiny, Rstudio

BSC HONS IN COMPUTING (CLOUD)

NUTH SIRIKITIWANNAKUL

Project Title: R8M Finder

STAND 64

LinkedIn: www.linkedin.com/in/nsirikitiwannakul

R8M Finder is an Android application which is designed to help users find their ideal roommate to rent with. The main target audience is the student population. Users can advertise their room or spare rooms, upload pictures and then contact those users who are looking to share a room to save cost.

Technologies used: Android Studio, Java, Google Firebase, Photoshop, Firebase Authentication

KEVIN O'ROURKE

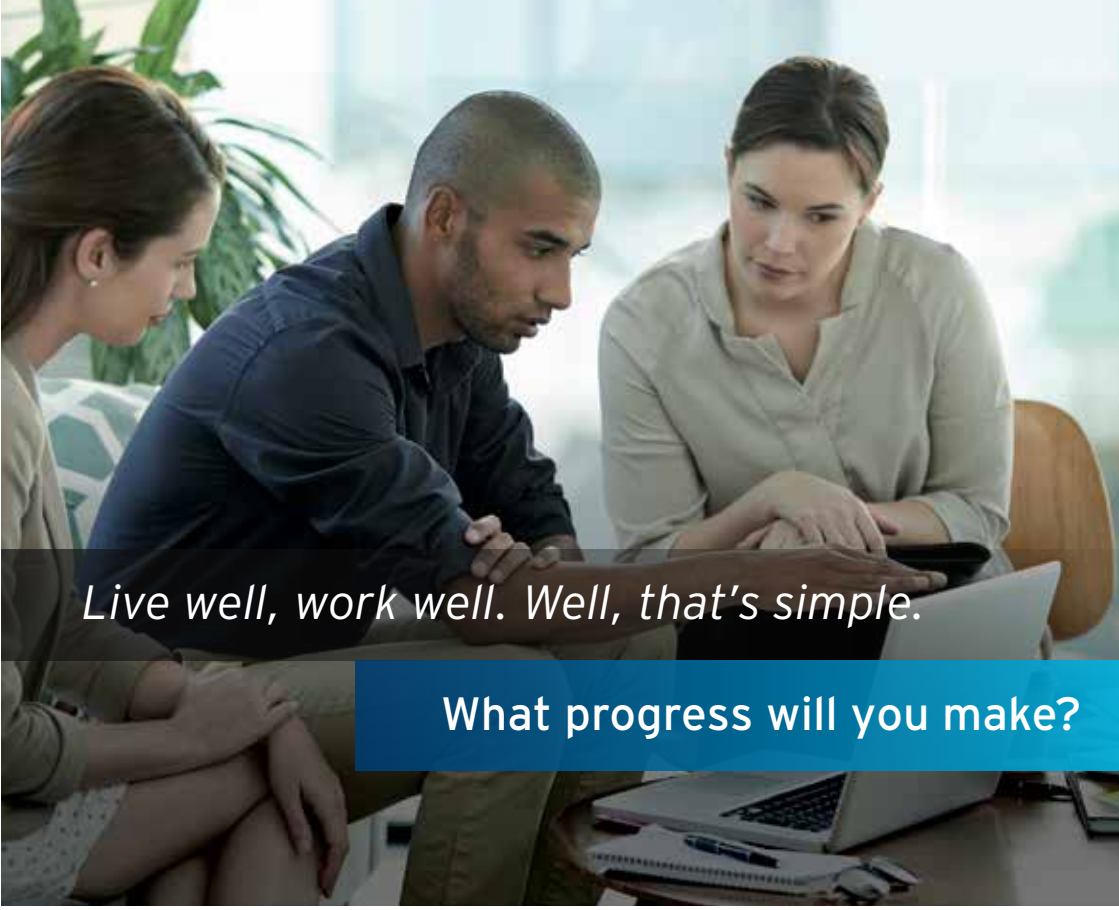
Project Title: My Club Subs

STAND 112

LinkedIn: www.linkedin.com/in/kevin-o-rourke

My Club Subs is a serverless Club membership management web application. The platform allows club members to pay their club membership and register for club events. Club administration have access to membership reporting and management tools. The latest front end and serverless web technologies are used to improve application performance and customer experience.

Technologies used: Python, Amazon Web Services, React.js, Stripe API



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