

Thomas Flynn

Software/Security Engineering Student

Lavalla, Ballynacally, Ennis, Co.Clare | 085-2348601 | tflynn@protonmail.com

ie.linkedin.com/in/thomas-flynn-855617128 github.com/16117743

Summary

Software/Security engineering student with expertise in the development of highly scalable and secure cloud applications using Docker containers on IBM Cloud. Solid background in Android mobile development, networking, container orchestration and microservices architecture. Exceptional troubleshooting and documentation skills.

Programming Languages:

Java, C/C++, Python, Node.js, Angular.js, Go, PHP

Education

Master of Engineering in Information and Network Security 2016 - 2017

[University of Limerick](#)

Expected First Class Honours

The Master of Engineering in Information and Network Security provides a comprehensive grounding in key areas of security of Information and Communications Technology (ICT) systems.

Bachelor of Engineering (Honours) in Computer & Electronic Engineering 2011 - 2016

[Galway-Mayo Institute Technology](#)

Grade Achieved- 73% (First Class Honours)

Advanced electronic engineering programme with a particular focus on embedded system development for both fixed and mobile platforms.

Masters Theses - Docker Containers Deployed Using Bluemix

Implementation of a back-end solution for the university campus mobile tracking application.

IBM Watson IoT Platform was used for the simulation of students on campus. Specifically the Node-RED tool.

IBM OpenWhisk was used for the design of the serverless back-end architecture. Microservices were written primarily in Node.js.

The front-end was written using Angular.js on Bluemix.

Container orchestration was carried out using IBM DevOps services.

Jenkins for continuous integration.

Ansible for continuous deployment.

Skills

Information & Network Security

Cryptography & Security Fundamentals, Cryptographic Mathematics, Communication & Security Protocols, Network & Host Security, Web-based Application Design, Biometrics, Data Forensics

IBM Cloud

Bluemix (Cloud Foundry), DevOps (CI/CD), OpenWhisk (Serverless architecture), Watson (Node-RED), WebSphere (MQTT)

DevOps

Jenkins, Ansible, IBM DevOps Services (CI/CD pipeline), Ant, Make

Docker

Docker, Docker Swarm, Docker Compose

Git Version Control

Branching, Merging, Pulling, Committing

Web Development

JavaScript (Node.js, Angular.js), HTML, CSS, PHP, REST, SOAP, Secure Application Design Techniques, Distributed System Fundamentals

Java

JavaFX, Java EE, Android, Java 8, Multi-Threading

C/C++

GDB debugger, Template classes, Polymorphism, Exception handling

Python



RSA implementation, ElGamal Elliptic Curve Implementation, Sage library, Number Theory

Databases

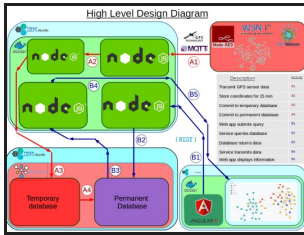


SQL (MySQL, MS SQL Azure), IBM Cloudant (IBM Graph), Redis

Documentation & Project/Time management



Trello (Kanban), Toggl (time management), screen-shot everything

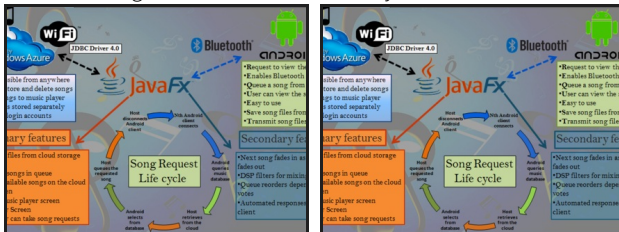


Theses Autumn (semester 1..

FYP - Music Host Interface

Grade Achieved - 85%

A virtual jukebox implemented as a Bluetooth server using JavaFX. Android client connects and selects a song from the available library of music.



FYP Presentation

FYP Report

Experience

Internship

March 2014 - August 2014

Spoogle

6 month internship for a Creative Web Design and Education Startup.

- Installation of security plugins and maintenance of client websites
- Development of WordPress plugins in PHP
- Monitoring of websites using Nagios
- Implementation and testing of MySQL client databases
- Front-end development of custom themes for clients
- Creation and review of lesson plans for Spoogle students