Kyriaki Lagou

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EDUCATION University of Southampton, Southampton, UK

Sep 2015 - Jun 2019

MEng Computer Science | First Class, Honours

Churchill Academy and Sixth Form, Bristol, UK

Sep 2010 – Jun 2014

A-Levels: Mathematics: A* | Physics: A | Chemistry: A | Fine Art: A

SKILLS Proficient in Java, Python

Familiar with React, HTML5, CSS3, SQLite

Exposure to Redux, Helm, Travis CI, Jenkins, Kubernetes

Technologies Spring Boot, Maven, Flask-RESTful, Docker, pytest, Spock testing

Development Git, Agile development, Jira, Confluence

EXPERIENCE Publicis Sapient, Backend Software Engineer, London, UK

Sep 2019 – Current

- Developing Java Spring Boot microservices that interact with Google Cloud PubSub and Kafka.
- Creating Helm charts for Kubernetes.
- Implemented React app for show-casing internal API functionality.

Cyber Range for Blockchain Platforms, Developer, Southampton, UK

Oct 2018 - Mar 2019

- Built comprehensive taxonomy report covering the attack surface of Bitcoin and Ethereum.
- Built server side for bespoke cyber range using Flask RESTful. Carried out code reviews throughout cyber range development.
- Project manager for team of 4. Responsible for testing out Ethereum attacks using cyber range.

Hewlett-Packard (HP Inc), Security Research Intern, Bristol, UK

Jun 2018 - Sep 2018

- Research-oriented internship focusing on network traffic analysis.
- Developed pcap parser (Java), for extracting meta-data from network packets. Data sourced from two years of network traffic captures, using Wireshark.
- Carried out data analysis (Python) and visualisation to determine common patterns in parsed data.
- Used unsupervised learning techniques (DBSCAN & SVM models) for network traffic classification.
 Successful in detecting various types of malicious traffic. Work was presented to research lab staff.

PROJECTS Fair Division for Task Allocation Processes

- Designed and implemented web app for allocating tasks in novice Agile teams, utilising fair division algorithms. Graded at 86%. Personally invited to present at computing lab opening ceremony.
- Modelled algorithms as constrained optimisation problems using CPLEX. Built back-end using Java.
- Created dynamic front-end using HTML, CSS, JavaScript, and Java Server Pages. Used SQLite to handle database queries from client and server.
- Carried out user study involving 13 participants indicated system showed notable improvement on existing approaches.

Collaborative Filtering Recommender System

 Implemented collaborative filtering approach for predicting unseen user ratings of online dating profiles based upon relevant neighbours from a large data-set of 19 million records. Developed using Java and SQLite.

Neural Network to Identify Fraudulent Bank Notes

 Implemented single-layer neural network, in Python, for identifying fraudulent bank notes with over 99% accuracy.

Supervised Learning Techniques to Identify Diabetes and Breast Cancer

■ Implemented and compared logistic regression and k-nearest neighbours algorithms (Python) in order to predict if a person has diabetes and malignant tumors.

Individual Selection for Cooperative Group Formation Investigation

- Explored social niche construction in populations of interacting 'cooperative' and 'selfish' agents.
- Used Python to model numerous 'evolving' populations, explored population dynamics, and implemented novel 'family' construction to more closely mimic real world social group construction.