

RADU ECHIM

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Location: London, United Kingdom

github.com/rechim25

EDUCATION

MEng Computer Science

University College London

Sept 2019 – Jun 2023

London, United Kingdom

- Minor: Applied Mathematics in Finance and Machine Learning.
- Received award for "Top 3 Best Final Projects" in year 1. Designed medicine delivery system architecture and efficient matching algorithms using unsupervised learning methods.
- Obtained award for Outstanding IBM x UCL Project in year 2.

EXPERIENCE

Software Engineer

@ S&P Global

Since August 2021

Remote

- Part of Portfolio Valuations team within Market Intelligence department, responsible for developing a world-leading portfolio valuation platform.
- Created additional pricing capabilities to OTC products through agile collaboration with financial analysts. Increased scalability of valuation services using AWS (S3 and Lambda).
- Extended trade-level risk sensitivities calculations to ensure regulatory compliance of Initial Margin across client portfolios.
- Technologies: Java Spring, Oracle SQL, PL/SQL, AWS.

Software Engineering Intern

@ Telligence Technologies

September-December 2020

Bucharest, Romania

- Part of agile software development team responsible for LiveU's outsourced projects. LiveU is a provider of 5G live streaming capabilities for CNN and FoxNews.
- Integrated license activation features for client devices. Extended unit control and command through world-map visualizations on the front-end controller application.
- Created new API endpoints on the back-end for the unit simulator using Java and Spring to improve stress testing capabilities between servers and web application.
- Technologies: Java, MySQL, Vuejs, Javascript, Websockets, REST API.

Programming Tutor

@ University College London

September-May 2021

Remote: London, UK

- Helped 1st year Computer Science students with programming concepts and practices in C, Haskell, Java and Python.
- Provided students with a deeper understanding of algorithms and data structures by discussing implementations in various programming languages.
- Supported students by answering their individual questions in weekly sessions, which helped them obtain an average of 70+ in all their programming coursework.

SKILLS

Java

Spring Framework

Python

Numpy + Pandas + Matplotlib

ML

SQL

Vue.js

React.js

Node.js

Git

Agile (SCRUM)

System Design & Algorithms

PROJECTS

Forecasting Influenza with Online Data

January - April 2022

- Implemented forecasting models to predict influenza-like illness prevalence in the UK using Google Search query data, under the guidance of our team supervisor, Dr. Ingemar Cox.
- Developed autoregressive, LSTM and GRU models based on literature methods. Performed statistical model evaluation, which suggested a significant improvement over autoregressive baseline models.
- Technologies: Python, Numpy, Pandas, Matplotlib, scikit-learn, SciPy.

Predicting Credit Card Default

November - December 2021

- Predicted which clients are likely to default on their credit card payments using dataset of Taiwan clients with 20+ features.
- Executed dataset analysis and visualizations for suitable feature and model selection. Performed dataset balancing using oversampling methods (e.g., SMOTE) which improved model accuracy.
- Contributed to Logistic Regression, KNN and Decision Tree implementation and evaluation, achieving a 0.899 accuracy.

IBM FISE Lounge

October 2020 - March 2021

- IBM FISE Lounge is privacy-safe, interactive video-calling application for facilitating social interactions during the COVID pandemic.
- Integrated in IBM's ecosystem of FISE apps and developed under the guidance of our IBM client Dr. John McNamara.
- Agile experience from Telligence, allowed us to adapt to drastic client requirement change midway and deliver 100% of Must- and Should-Haves. Obtained the top projects award.
- Technologies: React.js, Node.js, MongoDB, IBM Watson, Docker, Azure DevOps.