

# 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

- Major: Computer Science
- Minor: Applied Mathematics in Finance, AI and Data Analysis
- Received award for top 3 Y1 final projects. Designed food and medicine delivery system architecture and efficient matching algorithms using mathematical concepts.

## EXPERIENCE

### Software Engineer

@ IHS Markit (S&P)

Since August 2021

Bucharest, Romania

- SW as part of the Pricing Valuations Dev team responsible for the design and development of IHS's world-leading Portfolio Valuations platform.
- Agile collaboration with financial analysts to improve and add additional pricing capabilities to OTC products.
- Scaled valuation services using AWS (S3 and Lambda).
- Technologies: Java Spring, Oracle SQL, PL/SQL, AWS.

### Software Engineering Intern

@ Telligence Technologies

September-December 2020

Bucharest, Romania

- Worked in the SCRUM software development team responsible for LiveU outsourcing, providers of 5G live streaming capabilities for CNN and FoxNews.
- Integrated license activation features for client devices, unit control and command through map visualization in Vue.js.
- Rewritten features to comply with Chinese regulations by removing Google Services dependencies.
- 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 and evaluated forecasting models aimed to predict influenza-like illness prevalence in the UK using Google Search query data under the guidance of Dr. Ingemar Cox.
- Implemented, tuned parameters for autoregressive, LSTM and GRU models based on literature, 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 client from 2005 with 20+ features.
- Executed dataset analysis and visualizations for suitable feature and model selection. Performed dataset balancing using oversampling techniques (e.g., SMOTE) which improved model accuracy.
- Contributed to Logistic Regression, KNN and Decision Tree model implementations and evaluation, leading to a 0.899 accuracy for KNN.
- Technologies: Python, Numpy, Pandas, Matplotlib, scikit-learn, SciPy.

### IBM FISE Lounge

October 2020 - March 2021

- IBM FISE Lounge is privacy-safe, interactive video-calling application for to facilitate social interactions during the COVID pandemic.
- Integrated in IBM's ecosystem of FISE applications, developed under guidance of our client Dr. John McNamara.
- Agile experience from Telligence, allowed us to adapt to drastic change in our client's requirements midway and deliver 100% of Must-Haves and Should-Haves while obtaining the "2nd year top projects award".
- Technologies: React.js, Node.js, MongoDB, IBM Watson, Docker, Azure DevOps.