

Rajit Banerjee

rajitbanerjee.com | linkedin: rajitbanerjee | github: rajitbanerjee | rajit.banerjee@ucdconnect.ie | Dublin, Ireland

EDUCATION

University College Dublin

Sep. 2018 – May 2022 (Expected)

BSc (Hons.) Computer Science with Data Science

Dublin, Ireland

- **Current GPA:** 4.18/4.20 (First Class Honours)
- **Relevant Coursework:** Data Structures, Algorithms, Distributed Systems, Secure Software Engineering, Machine Learning, Optimisation, Programming for Big Data, Databases & Information Systems, Cloud Computing
- **Honours and Awards:** UCD Ad Astra Academic Scholarship, UCD Global Undergraduate Scholarship, BSc Computer Science Scholarship (Stage 2, Stage 3, Stage 4), Insight Research Scholarship, UCD Embark Award

TECHNICAL SKILLS

Languages & Frameworks: Java, Python, TypeScript, Node.js, React.js, Express.js, Spring Boot, GraphQL, Bash

Deployment, Cloud & Version Control: AWS, Docker, Git

Databases & Big Data: MySQL, DynamoDB, MongoDB, Apache Spark

WORK EXPERIENCE

Amazon Web Services

Mar. 2021 – Aug. 2021

Software Development Engineer Intern | AWS, TypeScript, Node.js/Express.js, React.js

Dublin, Ireland

- Project (campaign automation and management): Designed and implemented a campaign automation tool for Amazon Enterprise Engineering (Identity and Authentication).
- Integrated the campaign manager with Amazon's ticketing system to minimise human error and communication time during campaigns with over 5000 direct customers.
- Developed a Node+Express back-end API with React front-end components, following microservice architecture.
- Built and deployed infrastructure securely with AWS services including Lambda (serverless), DynamoDB, S3, StepFunctions, CloudWatch, and so on.

Insight SFI Research Centre for Data Analytics

Jun. 2020 – Aug. 2020

Research Intern | Python, OpenCV, Docker, Bash

Dublin, Ireland

- Project (human body pose estimation): Performed experiments with multiple pose estimation models to estimate the body keypoints of novice athletes (runners) using pre-recorded input videos.
- Designed Bash scripts and Docker containers to automate video processing on a remote server.
- Analysed time-series data and computed a variety of body pose angles from video frames to assist runners with maintaining optimal form and posture.

PRM Fincon Services Pvt. Ltd.

Jun. 2019 – Aug. 2019

Python Development Intern | Python, OpenCV, Tesseract OCR, Camelot

Kolkata, India

- Project (data extraction from financial reports): Refactored and optimised code to identify and extract tabular data (balance sheets, income statements) from PDFs by applying various image processing techniques.

PROJECTS

Distributed Airways | Java, Spring Boot, GraphQL, TypeScript, React.js

Dec. 2021 – Jan. 2022

- Flights metasearch engine simulation built using a Java backend, GraphQL for API design, React (TypeScript) frontend and Docker/Kubernetes for deployment.

Scrabble | Java, JavaFX, JUnit, Scrum

Jan. 2020 – May 2020

- Designed the game logic, GUI and bot, in a team of 3, using Java, JavaFX (GUI) and JUnit (testing).
- Followed Agile (Scrum) methodology, acting as the Scrum Master for multiple sprints.

EXTRACURRICULAR

- **Class Representative:** elected representative to the UCD Students' Union (2019-2021) for Computer Science.
- **Computer Science Demonstrator:** Lab tutor/demonstrator for UCD modules COMP20110 Discrete Mathematics, COMP20280 Data Structures and COMP20290 Algorithms.