

Oguz Tecirlioglu

GitHub: github.com/oguztecirlioglu | Phone: +44 7340467165 | Email: ot398@bath.ac.uk | LinkedIn: linkedin.com/in/oguztecirlioglu/

Education

MSc Software Systems with Placement (74% achieved) - University of Bath, United Kingdom (2021-2023)

- Specialised master's in computer science, focused on software engineering. Relevant modules include:
 - Artificial Intelligence (87%), Parallel Computing (71%), Functional Programming (83%), Reinforcement Learning (76%), Networking (76%), Software Engineering (83%)
 - Tutor for CM10195, Computer Systems Architecture 2 – taught students about Computer Networking protocols.

BEng Aerospace Engineering - University of Manchester, United Kingdom (2018-2021)

- Achieved First class honours.
- Dissertation Title: Structural Analysis of Scaled Models Using Deep-Learning (Grade: 83%)

Bilkent Laboratories and International School (2015 – 2018)

- Completed the **International Baccalaureate** Higher Level: Mathematics (6/7), Physics (6/7) Economics (6/7)
- IGCSE: Mathematics (A*), Sciences [Physics, Chemistry, Biology] – Double Award (AA)
- SAT Math: **790/800**, SAT Math Level 2: **800/800**

Work Experience

Nomura – Software Developer (June 2022 – June 2023)

- Integrated GraphQL over an existing Java REST API.
- Refactored a Python backend API, improving computational complexity and reducing API call latency by 85%.
- Containerised existing applications using Docker.
- Developed modern full stack web-applications using React.js and Python Flask.
- Implemented end-to-end and unit tests using Jest and React Testing Library.
- Created, published, and maintained a React Component library on our internal NPM repository – used by other teams.
- Authored how-to tutorials and library documentation on Confluence for other developers to reference and learn from.

SISKON Software & Automation - Software Developer (July – September 2021)

- Coded the Front-End and Back-End of a web application used by a client with revenue of \$20 Billion.
- Led the team of 4 other interns in an agile fashion: work done in sprints, with regular team retrospectives, daily stand-ups, and feedback sessions with other team leaders. Quickly understood and explained code base to other interns.
- Technology used:** React, SQL, SAP Workbench (for the API), Git, Microsoft Azure.

Personal Projects

Sorting and Pathfinding Algorithms Visualiser – Software Developer

- Created an application which visually displays: Bubble Sort, Quick Sort, Merge Sort, and Dijkstra's Algorithm.
- Technology used:** C++, SFML (Simple and Fast Multimedia Library, a C++ library).

CS50 Finance – Software Developer

- Developed a brokerage web application that allows users to create their own accounts, view the shares they own in their stock portfolio, and simulate buying and selling shares at current prices (storing all information on database).
- Technology used:** Python (Flask), HTML, CSS, SQLite3, IEX Cloud API.

Deep-Learning for Scaled Structural Analysis - Final Year Project for Bachelors

- Developed a DNN model that optimises the prediction of plastic deformation in scaled models, improving accuracy of predictions from 30% to 0.5%. Received offer to co-author publication of findings in a scientific journal.
- Technology used:** TensorFlow, Keras, NumPy, and linked ANSYS with Python.

Technical Skills & Languages

- Programming languages:* C++, Java, Python, C, JavaScript, React.js, CSS, SQL, SQLite.
- Tools:* Git, GitHub, Docker, Docker Swarm,
- Languages:* English (Fluent), Turkish (Native), Spanish (A2), Serbian (Basic).

Extracurriculars, Leadership and Activities

- PASS** (Peer Assisted Study Sessions) **Leader** at the University of Manchester Aerospace Engineering.
- University of Bath **academic representative** for MSc Software Systems.
- Captain** of the **basketball** team in high school – I enjoy outdoor activities such as hiking and running.