

# Burhan Tekcan

[burhantekcan@gmail.com](mailto:burhantekcan@gmail.com) | [linkedin.com/in/burhantekcan](https://linkedin.com/in/burhantekcan) | [github.com/burhanT](https://github.com/burhanT)

## EDUCATION

---

### King's College London

*Master of Science in Computer Science (Artificial Intelligence)*

- Predicted: First Class Honours

London, United Kingdom

*Aug. 2021 – July 2025*

### Christ's College Finchley

*A\* – Mathematics, A\* – Further Mathematics, A\* – Computer Science, A – Physics*

London, United Kingdom

*Sept. 2019 – June 2021*

## EXPERIENCE

---

### Software Development Intern

June 2024 – August 2024

*S&P Global*

*London, UK*

- Produced a scalable serverless solution for generating batch reports, reducing RDS instance costs by 67%
- Utilised Apache Spark, AWS S3, Athena and Lambda to perform operations producing requested reports
- Implemented an improved pipeline for writing measures to PostgreSQL database

### Solutions Intern

August 2023

*Schroders*

*London, UK*

- Created a tool to evaluate multiple large datasets against set ESG criteria
- Produced a graphing system to output ESG evaluations based on provided tickers
- Reduced team workload for each client's portfolio through assembled tools

### Polygon Hackathon

October 2022

*Polygon x EasyA*

*London, UK*

- Led a team of 4 to produce a decentralised loyalty scheme web app using Polygon's Lens protocol and PolygonId
- Presented within 24 hours to a judging panel and won 3<sup>rd</sup> place amongst 50+ teams

## PROJECTS

---

### Quality constraints for minimal perturbation problems | *Python, NumPy, Pandas, PuLP*

- 75-page dissertation project on university timetable optimisation using integer programming
- Implemented novel quality optimisation structure utilising weighted soft constraints
- Modelled university timetable, location and personnel availability to use within the objective function

### Habitopia | *Typescript, React Native, AWS Amplify, Git*

- Working in a team of 9, designed and developed a social habit-building mobile app
- Developed a real-time live leaderboard system using AWS Amplify and Typescript
- Designed and developed front-end components, and unit testing performed with Jest

### Lexer, parser & compiler | *Scala*

- Developed functional programming language that can be compiled to LLVM-IR code using Scala
- Gained a fundamental understanding of lexers, parse trees, abstract-syntax trees and language compilation

### Pacman AI | *Python*

- Developed a Q-Learning agent for Pacman written in Python, achieving a 90% win-rate
- Constructed a neural-network classifier with a single hidden layer and ReLU activation for a Pacman agent
- Attained comprehensive knowledge of reinforcement learning techniques, reward function design, and function approximation methods

## TECHNICAL SKILLS

---

**Languages:** Java, Python, SQL (Postgres, MySQL, SQLite, Trino), HTML/CSS, Scala, Typescript

**Frameworks & Libraries:** React Native, JUnit, Jest, Pandas, NumPy, Matplotlib, PuLP, SciPy

**Developer Tools:** Git, Docker, AWS Services (S3, Lambda, Athena, Amplify, EMR, RDS), Jira, Figma, Vercel