

Ananya Hari Narain | ananya.harinarain@gmail.com | +44 7541899992

I am a diligent and driven individual with an interest in data science and fullstack development. I have experience in Java, Python, C++ and JavaScript and am comfortable with C, OCaml and Scala.

Education

University of Cambridge | *BA(Hons) in Computer Science* | *October 2019 - June 2022*

- Achieved high 2:1 in final year examinations

Achievements

Best Performance in Sidney Sussex College for Computer Science | *June 2022*

Applied Data Science in Python Specialisation (94%), University of Michigan | *November 2022 - January 2023*

Distinction in Mathematical Olympiad for Girls | *2017*

Work Experience

Software Engineer at Ocado (Graduate Scheme) | *September 2022 - Present*

Data Scientist | *September 2023 - Present*

- Worked as **data scientist** using **Python**, **Tensorflow**, **SQL** to create **TFT**, **RNN** and **TCN** models for complex **time series forecasting** of demand of stock
- Added a feature to our production models that saved £2m over the Christmas period
- Conducted analysis of the effect of numerous implemented features using custom evaluation notebooks with visualisations of metrics using **matplotlib** and **numpy**
- Involved in in-house research groups, read journal club papers to suggest model improvements

Backend SWE | *March 2023 - September 2023*

- Worked in routing simulation to develop and devise features to optimise routing algorithms in **Java**
- Used Discrete Event Simulation software
- Single-handedly autowired our entire (**100,000+ line**) codebase with Spring Boot, improving speed and efficiency greatly
- **Responsible for feature** that enabled efficient routing in sparse geographies
- Spearheaded initiative to improve operational visibility within Logistics, creating visualisations in **Python** with **matplotlib** that transformed our partner success stories

Fullstack SWE | *September 2022 - March 2023*

- Worked as a **fullstack developer** with **React** frontend in **TypeScript** and **HTML** with **Java** backend
- Added features to web apps to improve usability
- Revamped scenario tests to run **65% faster**, Increased code coverage from **82% to 98%**
- Created **AWS SQS** queues to enable an integration between two systems, creating an adaptation layer
- Took on the role of **Tech Lead** for an integration and created roadmaps, facilitated meetings between teams and am responsible for delivery

NLP Research Intern at Techwolf | *July 2021 - September 2021*

- Researched and **implemented a Poincare model** to learn hierarchies in an unsupervised manner as part of solo project
- Obtained **accuracy scores of 87.3%**
- Used Python with libraries such as: PyTorch, Gensim, Numpy, Pandas

Software Intern at University of Cambridge | *July 2020 - September 2020*

- Helped to **automate the work upload and marking process** for university supervisions
- Implemented functionality to generate per-assignment downloadable LaTeX templates for each students, using SQL and Java
- Added features to the UI using **TypeScript** with **Angular**

Projects

Reimplementation of wav2vec | *2024*

- Currently working on reimplementing wav2vec from the original paper using **TensorFlow**

Suite of Chrome Extensions | 2023

- Developed **3 extensions** to aid personal productivity, including display of reading time, a notepad and timer
- Used **HTML, CSS and Javascript**

Trading bot | 2023

- Developing a bot to **automate trades of cryptocurrencies** using common indicators such as moving averages, **MACD** and **RSI**
- Developed in **Python**

Automatic Generation of Podcast Summaries from Episode Transcriptions | 2022

- Final year dissertation
- **Implementation and detailed analysis** of the performance of different summarisation models, including **BERT**, **Pointer-Generator** and **Reinforcement Learning** models

De-biasing the Employment Process | 2021

- As part of a group, **developed a system allowing users to detect and remove bias from job adverts**, largely in Python
 - **Developed the NLP backend engine** to identify bias and leveraged NLP techniques to suggest alternative phrasing
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Other Activities

Talk for KCL Womxn in STEM | January 2024

- Part of a panel where I delivered a talk on my journey into SWE for the members of King's College London's Womxn in STEM society

Pillar Lead for Women in Tech Events in Ocado | September 2023 - Present

- Organised event for 100+ people with a large panel with C-suite members
- **Implemented a Slack bot in Python** using Slack's API to pair up women in our Slack channel to organise meetings, used by 100+ members of the community

Churchill CompSci Talk Series | November 2020

- Delivered a talk on Constraint Programming as a part of talk series at Cambridge

women@CL Social Chair | September 2020 - July 2021

- Organised a variety of online social events for women studying Computer Science in Cambridge