

Aarjav Jain

PERSONAL WEBSITE: [HTTPS://AARJAV-JAIN.NETLIFY.APP/](https://aarjav-jain.netlify.app/)

First-Class Theoretical Physics Masters graduate from University of Cambridge,
Working as a Full-Time software engineer at THG. Accepted first author for NeurIPS
2022 workshop paper, ArXiv link: <https://arxiv.org/abs/2212.05892>

SKILLS SUMMARY

- Programming: Python, Java, Javascript/Typescript (React), GCP, Docker
- Python & ML libraries: Pandas, JAX, TensorFlow
- Research, Technical writing and presentation experience
- Skill and interest in Mathematics & ML
- Teamwork experience in a technical environment

EXPERIENCE

SOFTWARE ENGINEER (ML ENGINEER) – THG – OCT 2022 - NOW

Created end-to-end full-stack ML model platform. Performed GCP migration. Helped create a model deployment template, saving the data scientists countless hours in deployment and monitoring headache. Migrated ML APIs to gRPC from REST, giving a 5x reduction in response time. Created a data drift detection protocol, which includes data monitoring, and statistical measure for when retraining is required. Applying this to our recommendations model. Also have worked in Python and Java. Lead a team of 5 to create a full-stack sales dashboard using React and Javascript.

ML RESEARCH INTERN – FARADAY INSTITUTION – SUMMER 2021

Created surrogate models for the thermal runaway (explosion) of LI-Ion batteries using Gaussian processes using battery fatigue data, cutting computation time by 95%. Prediction of battery reaction parameters allowed a simpler model expression. Listed as 3rd author in the paper subsequently published.

EDUCATION

CAMBRIDGE UNI – MSc PHYSICS – 2018 - 2022 – CLASS 1

- Achieved First Class an overall grade of 72% in my MSc (all with in-person, closed book exams). On my Exoplanets paper, I got 88%, and 76% in a theoretical physics paper (Quantum Field Theory)
- Achieved 75% in MSc thesis on Deep Learning: 'Using neural networks to learn, embed and plot metric spaces under Ricci flow'. Accepted by NeurIPS 2022 workshop: ML in the Physical Sciences. Worked in Python with JAX & TensorFlow.

KING EDWARD ASTON IV GRAMMAR SCHOOL – 2011 - 2018

- 4 A* grades in A-Level Maths, Further Maths, Physics and Chemistry
- Gold in UKMT Maths Challenge and Kangaroo, Silver in British Physics Olympiad