

Yousuf Mohamed-Ahmed

<https://ymohamedahmed.github.io>
ym346@cam.ac.uk

LINKS

Github:// [ymohamedahmed](#)
LinkedIn:// [yousufmohamedahmed](#)

SKILLS

LANGUAGES

Python • Java (incl. Groovy & Kotlin) • C#
• Standard ML/OCaml • Prolog

TECHNOLOGIES

Numpy • TensorFlow • SciPy • scikit-learn
• Protobuf • Kubernetes • Numpy
Spark • Pandas • AWS • Keras

ACHIEVEMENTS

ACADEMIC

600/600 in Mathematics A-Level
Gold in UKMT Senior Maths Challenge

PUBLIC SPEAKING

LAMDA Grade 8 (Gold) : Distinction

SOCIETIES

CS SOCIETY

FORMER PRESIDENT (2016-17)

- Introduced younger students to basic ideas in CS
- Improved my ability to articulate technical ideas

COMPETITIONS

PROGRAMMING

- UKIEPC 2017
- Hack Cambridge
- Google HashCode 2018

EDUCATION

UNIVERSITY COLLEGE LONDON

MSC IN MACHINE LEARNING

Sept 2020 - August 2021 (Incoming)

- Courses including: Supervised Learning, Probabilistic and Unsupervised Learning, Graphical Models, Reinforcement Learning, Statistical Natural Language Processing

UNIVERSITY OF CAMBRIDGE

BA IN COMPUTER SCIENCE

Expected June 2020 | First Class with Honours

- Courses including: Functional Programming, Java, Databases, Algorithms, Machine Learning, Concurrent and Distributed Systems, NLP, Computer Vision, Cloud Computing
- **Dissertation** : "Remote heart rate estimation from video" : using Computer Vision and ML techniques, the heart rate of a user can be inferred from changes in the colour of their face picked up by a camera

READING SCHOOL

2010-2017 | Reading, UK

- GCSEs: **11A*s, 1A** • A Levels: **4A*s** : Maths, Further Maths, Computer Science, Chemistry • Advanced Extension Award in Maths (**Distinction**)

EXPERIENCE

G-RESEARCH | SOFTWARE ENGINEERING INTERN

Jun 2019 – Sep 2019 | London, UK

- Created a Python package for researchers to interact with a large vectorized calculation platform, working in **Python** and **C#**
- Developed a Jupyter notebook extension from scratch to enable easy exploration of the analytics available for computation

INTUIT | SOFTWARE ENGINEERING INTERN

Jun 2018 – Sep 2018 | London, UK

- Worked as a part of a backend engineering team on redesigning a polling system to use message consumption in Groovy
- Strong emphasis on TDD and agile development

PROJECTS

SPARK PARAMETER ALLOCATION | GROUP PROJECT

- Given a particular Spark application, tasked with finding the parameters that minimise execution time in less than twenty executions
- Implemented a modified version of simulated annealing; attempts to rapidly converge on the optimal parameter set

PREDICTING THE READMISSION RATES OF DIABETICS | SOLO PROJECT

- Given a dataset containing information about various hospitals encounters with diabetic patients, I was tasked with predicting the time before any subsequent hospitalisations
- I implemented several different models using TensorFlow ranging from simple linear models to ensemble models and compared performance