

Michael Belyaev

 +44 7450 236803  github.com/misha7b  linkedin.com/in/misha7b  michael7belyaev@gmail.com

Mathematics student looking for an internship combining mathematics and computer science.

EDUCATION

University of Edinburgh <i>Mathematics MMath (Integrated Masters)</i>	Sep. 2022 - Jun. 2027 <i>Averaging a first (85%)</i>
Relevant Coursework: Statistics, Probability, Introduction to Algorithms and Data Structures, Foundations of Data Science, Stochastic Modeling, Machine Learning	
Balerno High School <i>Advanced Highers: Mathematics (A*), Mathematics of Mechanics (A*), Physics (A), Computing Science (A)</i>	Aug. 2016 - June 2022

PROGRAMMING SKILLS

- Programming Languages:** Python; Exposure to R, Rust, Haskell, C++
- Libraries and Tools:** Git, NumPy, Pandas, Matplotlib, Scikit-learn

EXPERIENCE

School of Informatics Research Internship <i>University of Edinburgh</i>	Jun. 2024 - Aug. 2024
<ul style="list-style-type: none">Researched techniques on dimensionality reduction for k-NN search and coded implementation in Python.Delivered weekly presentations on my progress.Studied applications of spectral graph theory in clustering.	
Demonstrator/Marker/Tutor <i>University of Edinburgh</i>	

- Tutored Introduction to Computation and Introduction to Data Structures and Algorithms.
- Conducted weekly live tutorials and provided academic support to a group of 8 students.
- Assessed and provided feedback on assignments.

PROJECTS

HYPED Software Team <i>University of Edinburgh Hyperloop Team</i>	Sep. 2023 - Present
<ul style="list-style-type: none">Localisation Subteam Member — Sep. 2023 - Jan. 2024Localisation Project Manager — Jan. 2024 - PresentLeading a team responsible for estimating the displacement, velocity, and acceleration of the pod.Implemented sensor fusion using the Kalman Filter algorithm, achieving $\pm 1\%$ accuracy.Rewrote the implementation in Rust for improved performance and efficiency.	

Cancellation of Planned Operations in the Scottish NHS

- Analyzed cancellation patterns in Scotland's healthcare system using Python (Pandas, NumPy, Matplotlib, Seaborn).
- Applied statistical techniques including linear regression and two-sample t-tests to evaluate trends.
- Visualized findings to identify regional trends, and completed a detailed report.

AWARDS AND ACHIEVEMENTS

- Scottish Mathematical Challenge Gold in S5 and Silver in S6.
- Gold in the Senior UKMT - top 7% of participants.