CALUM HARVEY

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EDUCATION AND QUALIFICATIONS

Cambridge University | *PhD Electrical Engineering* | Cambridge, UK   **Oct 2022 – Oct 2026**
- Joint funded by EPSRC ICASE and Microsoft Research UK
- Research area: Probabilistic Machine Learning in Optical Fibre Communication Systems
- Modules: Computational Statistics and Machine Learning, and Fibre Optic Communication

Warwick University | *MSc Data Analytics* | Coventry, UK   **Oct 2020 – Oct 2021**
- Achieved Merit
- Dissertation: Developed new Artificial Intelligence algorithm for maximising influence spread in non-
- uniform large-scale social networks (78%)
- Modules include: Data Mining, Machine Learning, Algorithmic Game Theory, Natural Language Processing

Newcastle University | *BSc (Hons) Computer Science* | Newcastle, UK   **Sep 2017 – Jun 2020**
- Achieved Upper Second Class, Honours Degree
- Dissertation: Artificial Intelligence algorithm Implementation and Performance Comparison in
- Python, using Data Science Libraries and MySQL (72%)
- Modules include: Fault Tolerance, Real-Time systems, Database Technology, Network Security

Stewart's Melville College | Edinburgh**,** UK   **Aug 2011 – Jun 2017**
- *Advanced Highers***: B** Computer Science
- *Highers*: 7 subjects with **AAB** Maths, Physics, Computer Science

WORK EXPERIENCE AND EXTRACURRICULAR ACTIVITIES

Cambridge University Squash Club | Treasurer | Cambridge, UK   **Jul 2023 – Present**
- Responsible for handling all financial matters related to the club such as equipment and coach costs
- Built a yearly financial budget to ensure correct allocation of funds prior to academic year beginning
- Pay invoices and monitor transactions to ensure the accounts remain balanced
- Work with other committee members to organise events throughout the year ensuring budget feasibility

Kainos | Data Engineer | London, UK   **Aug 2021 – Sep 2022**
- Data services helping organisations transform using technology to become data-driven
- Trained in Azure and AWS cloud technologies using Java, Scala, and Python
- Developing data solutions by deploying ETL and data pipelines within an agile environment
- Utilising data to develop machine learning models to help businesses gain insight from their data

Edinburgh Sports Club | *Squash Coach* | Edinburgh, UK   **Jun 2014 – Aug 2017**
- Qualified squash coach for both adults and children for 3 consecutive years
- Led various multi-sport camps by designing and implementing full activity timetables

SpaceLabs Healthcare | *Software Engineering Insight* | Edinburgh, UK   **Jun 2016**
- Completed 1 week work insight with software division of mid-cap healthcare company
- Performed unit testing of software currently being developed, helping identify bugs in remote heart monitors

PUBLICATIONS

- **C. Harvey**, M. S. Faruk and S. J. Savory, "Data-Driven Erbium-Doped Fiber Amplifier Gain Modeling Using Gaussian Process Regression," in IEEE Photonics Technology Letters, vol. 36, no. 18, pp. 1097-1100
- **C. Harvey** and S.J. Savory "Uncertainty Propagation Through Cascaded EDFA Gain Models using Gaussian Processes" (under review)

SKILLS, INTERESTS AND AWARDS

- **Interests:** Squash (Cambridge University first team) | Tennis (played in county's team)
- **Languages:** English (native), French (beginner), Korean (beginner)
- **Awards:** Best App in second year (built tourism app and website for Northumberland council) | Computer Science Prize in sixth form
- **Certifications:** Microsoft Certified: Azure Data Fundamentals, Databricks Associate Developer for Apache Spark 3.0