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I am currently a student working on achieving in the intersection of computing and math. Also, the application in solving (real-world) problems. I know not only the theory in computing, but also the practicality of computing. Therefore, I have developed my communication, organization and independent learning skills.

Education

University of Edinburgh Sep 2023 – Aug 2025
MSc Artificial Intelligence

- Machine Learning and Pattern Recognition: Machine Learning Fundamentals, Bayesian Optimization, Gaussian Process and Variational Inference.
- Machine Learning Practical: Fundamentals of the Neural Networks, Convolutional Neural Networks and Recurrent Neural Networks. **Python** and **Pytorch** for implementing the Neural Networks.
- Automated Speech Recognition: Gaussian Mixture Models, Hidden Markov Models, Context-dependent phone modelling, Weighted-Finite-state transducers, Speaker Adaptation, Encoder-Decoder Models, Speaker Adaptation, Multilingual and Low-resource speech recognition.
- Image and Vision Computing: Histogram of Gradients (HOG), SIFT,
- Applied Cloud Programming: Monolith and Microservices architecture, Spring Boot, Kafka, RabbitMQ, REDIS, GraphQL, BLOB, Docker, Apache Flink, Serverless Computing, FaaS,
- Reinforcement Learning: Multi-armed Bandits, Markov Decision Process, Monte Carlo methods, Temporal-difference learning, Value Function approximation, Policy Gradient Methods, Deep Reinforcement Learning and Multi-agent Reinforcement Learning.

Goldsmiths, University of London Sep 2019 – Jun 2023
BSc (Hons) Computer Science (1st Class)

- Neural Network(Year 3)
- Dynamic Web Application(Year 2) & Databases and the Web (Year 3)
- Algorithms 1 and 2 (Year 2)
- Computing Project 2(Year 2)
- Java for Industry/ Extended Java (Year 2)

Computing Projects:

- Sudoku Problem Solver (Year 1) and Primes (Year 1) done on **JavaScript**.
- Huffman coding (Year 2), Wordle on Java's Swing Library (Year 2), Airline Booking System (Year 2) all done on **Java**.
- My final computing project (thesis)is on: Analytical comparison of different **data compression algorithms** using Kolmogorov complexity (Year 3)

Machine Learning Projects:

- **Energy efficiency prediction** problem applying different Machine Learning Models
- Created **Deep Fusion models** that takes multiple data types to **predict house prices**.
- Masters Dissertation: **Spatio-Temporal ASF Risk Prediction (Northern Italy).**
  Built an end-to-end multi-modal ML pipeline to forecast African Swine Fever outbreak risk using weekly spatio-temporal snapshots. Fused satellite remote sensing (Google Earth Engine), epidemiological records, and OSM-derived geospatial proximity features; trained tabular baselines and deep fusion models with multiple CNN backbones and stacking. Evaluated under severe class imbalance using AUROC/PR-AUC and produced interpretable risk heatmaps for surveillance prioritization.

Experience in Technology

- **AI Engineer (Internship) RadicalX** – June 2023 – October 2023:
  • Led and coordinated a 3-member team in developing a GPT-3.5 OpenAI API-based chat assistant, achieving 98% intent classification accuracy using fine-tuning and prompt engineering.
  • Implemented a robust ML data pipeline and deployment process for efficient model updates and scalability.
  • Conducted comparative analysis of Generative AI models, including emerging Large Language Models (LLMs) Llama-2, Koala, and Pinecone, to generate highly relevant, grounded responses.
  • Employed an automated ML data pipeline and deployment techniques for fair evaluation and practical insights.

Technical Skills:

- Throughout my degree in BSc Computer Science, I learnt to program on **Python**, **JavaScript**, **SQL**, **Java** and **MATLAB**. Moreover, I learnt develop algorithms, write reports related to my projects in my degree and use skills that will be useful in my career, like **GitHub**.

- As a means of further developing my programming skills, I am **self - studying Java** on my own, using both textual and online resources like YouTube and a book written by different authors.

- In my final year, I learnt to use **Skit-learn**, **Pandas**, **NumPy** and **Matplotlib** in my **Machine Learning module** and **Personal Project**.

- In my dissertation, I learnt to use the PyTorch library to train the models, analyze the models performance and the test their predictive capability of the hyper-tuned models.

- I took the initiative to join an cohort and enhance my knowledge on the use of Large Language Models and the open source tools can be applied to design your own agents that consists of Large Language Models.

Transferable Skills

Teamwork:

- In my pursuit of the Duke of Edinburgh's Award, I collaborated with other team members to resolve challenging problems that arose in our coordinated trip.

- Working in an Internship at a start up there I was working on amazing projects. As a result, I am enthusiastic to work on Personal Projects related to Natural Language Processing, Knowledge Graphs and Deep Learning.
- In various course works and university projects, I worked with diverse group of people and various tasks in the given projects. I would need to maintain professional behavior and attitude and be ready to support them when they would have difficulties on completing their given tasks.

Organization:

- I created a system of time management in order to facilitate the modules from my course with otherwise not covered by the modules of my year of my degree.
- When I was new to **Python**, I was **eager to learn** more about it, more than what my course could offer. I **adapted** by using online sources like GeeksforGeeks, YouTube and the university library at Goldsmiths.
- In my second year of BSc Computer Science, I was working in a team and we want to replicate the Amazon website (selling only laptops). In the beginning of you work, one of the member just ghosted
- In masters, I needed to balance my working time with the Masters studies. I was able to make multi-task with my dissertation and part-time work life. This required to use time efficiently so that both roles can be done properly.

Communication:

- In order to carry out a model-kit-building history project in secondary school, I would **negotiate** and **organize** with other group members, **consulted** with teachers, and **discussed** workflow using both in-person and remote communication channels.
- I used to running the **Goldsmiths Badminton Club**, as a **president**. On weekly basis, I would **communicate** with my committee members and competitive team members. Furthermore, I would **organize** the teams that will be play against other universities and promote the club in the university via Instagram and Facebook.
- In my dissertation, I maintained a constant line of communication with my supervisors and that was vital to update my supervisors with progress of the dissertation.