Emily Au

Edmonton AB | +1(825)967-9669 | emilyaua09@gmail.com

https://github.com/hea0516 | https://www.linkedin.com/in/emily-au-535084229/ | Portfolio

Dedicated MSc student with a passion for Data Science and seeking opportunities for leveraging and enhancing skills to drive organizational innovation and foster personal growth

Highlights of Skills

- **Data Analytics:** Python | SQL | R | MATLAB | Azure Data Factory | Google Sheet | MS Excel
- **Programming:** Javascript | C++ | Java | HTML5 | CSS | Node.js | React.js | MongoDB
- **IT Tools:** Azure | GitHub | SourceTree | Jira | PyCharm | Microsoft Office Suite | LaTeX
- **Creativity and Strong Problem-Solving and Analytical Skills**
- **Excellent Collaboration and Communication Skills**

Education

MSc in Modelling, Data and Predictions (Mathematical and Statistical Sciences)   Sep 2023 – Present

University of Alberta (UofA), Edmonton AB

Related Courses: Mathematical Modelling, Statistical Computing and Natural Language Processing

BSc in Mathematics with minor in Computer Science   Sep 2018 – May 2022

The Chinese University of Hong Kong (CUHK), Hong Kong

Related Courses: Data Analytics, Optimization, Machine Learning, Artifical Intelligence, Software Engineering, Big Data Computing and Database Systems

Relevant Experience

Data Engineer, EY Mtel Solutions Limited, Hong Kong   Aug 2022 – Jul 2023

- Worked with consulting and project management teams to optimize and add new features to price forecasting software products addressing the needs of clients
- Designed database schema, managed databases and wrote SQL stored procedure by MSSQL to retrieve data for developing a commercial analytics software
- Performed data cleansing and processing by Azure Data Factory, ensuring seamless dataflow for telecommunication data analysis project

I.T. Intern, AritaOne Software Limited, Hong Kong   Jul 2020 – May 2022

- Investigated meachine learning techniques and methodologies and assisted machine learning specialist to develop horse-racing prediction models by scripting, Python and SQL
- Implemented a web-based Enterprise resource planning (ERP) application for clients to manage their business and generate reports and dashboards automatically by Javascript
- Developed manuals and Standard Operation Procedures (SOPs) to help my supervisor and clients understand the implementation of ML models and data analytics software

Student Researcher,   Jan 2021 – Aug 2021
Undergraduate Research Opportunity Program (UROP)
Department of Mathematics, CUHK

- Investigated machine learning techniques, methodologies and knowledge in engineering to solve numerical problems in Computational Fluid Dynamics (CFD)
- Developed a neural network by TensorFlow in Python to improve the accuracy of published methods to solve CFD problems under the supervision of Prof. Eric T. Chung
- Awarded a silver team award for presentation on the concepts and implementation of neural network during the UROP workshop

Neural Network Project – Drug Molecular Toxicity Prediction,   Sep 2020 – May 2021

- Built a convolutional neural network (CNN) to predict the toxicity of molecules by TensorFlow and Numpy in Python

Visit my GitHub / Portfolio for details and other projects: Drug Toxicity Prediction Neural Network Project and Quiz Game Project etc.

Additional Experience

Volunteer, Friends Across Campus Volunteers 2023-2024, UofA   Feb 2023 – Present

- Organized events aimed at fostering connections and facilitating friendships among university students
- Facilitated a Self-Care Tea Party event as a volunteer, promoting wellness and relaxation

Volunteer, Team Up Science Computer Science Workshop 2023, UofA   Oct 2023

- Taught high school students basic Python programming and helped them to build a Blackjack game project, and provide guidance and assistance to them

Private Tutor, Hong Kong (Online)   Sep 2019 – Jul 2020, Nov 2023 – Present

- Taught junior high school and high school students mathematics to improve their test scores
- Prepared notes, exercises and tests that targeted their weaknesses for their self-studies

Financial Secretary, The Mathematics Society, The Student Union of CUHK   Jan 2019 – Dec 2019

- Prepared budget reports and financial reports using Excel for the society
- Communicated with professors and organized events for mathematics students

Student Helper, Information Technology Services Centre (ITSC), CUHK   Jun 2019 – Jan 2020

- Provided digital supports for students and staffs and helped them to resolve computer issues
- Checked and renewed computing devices in ITSC to ensure their functionality

Other Skills

- **Language**: Native Chinese (Cantonese and Mandarin) speaker and fluent in English
- **Certification**: Microsoft Azure Fundamentals, Azure Data Fundamentals (AZ-900, DP-900)