CALVIN CHAN

Toronto, ON | (647) 835-1889 | calvintsingshing.chan@gmail.com

LinkedIn: linkedin.com/in/calvin-ts-chan/ | GitHub: github.com/chantsin

Summary

Results-driven technical expertise with a strong mathematical background and customer facing experience. Ability to convey complex data insights to technical and non-technical audiences, enhancing decision-making process. A creative problem solver who collaborates effectively in a positive team dynamic to deliver impactful solutions to stakeholders. Proficient at managing multiple projects while maintaining extensive attention to detail, staying organized, and prioritizing tasks effectively. Bilingual in English and Cantonese.

Skills

- Tools: Python, SQL, Excel, R, C, Tableau
- Frameworks: Spark, Hadoop, Hive, AWS (EC2, EMR, S3), Streamlit
- Libraries/Packages: NumPy, Pandas, SciPy, StatsModels, Scikit-Learn, XGBoost, TensorFlow, PyTorch, PySpark, NLTK, Matplotlib, Seaborn, Plotly, ggplot2, dplyr
- Version Control: Git, GitHub

- Data Analysis
- · Dashboards and Reports
- Statistical Analysis
- Machine Learning
- Collaborative Teamwork
- Technical Presentations
- · Problem Solving
- Customer Service

Projects

ECG Classification via Fourier Transforms BrainStation

01/2024 to 04/2024 **Toronto, Ontario**

- Developed an end-to-end solution by building, training, and deploying ML models using Streamlit.
- Implemented Logistic Regression through scikit-learn, as well as RNNs and CNNs using TensorFlow and PyTorch to classify electrocardiogram time series signals with 85% accuracy.
- De-noised over 20 million sample points through Fourier Transforms using a data pipeline, effectively removing data inconsistencies to improve model reliability.

SwiftMod **Shopify-BrainStation Hackathon**

04/2024 **Toronto, Ontario**

 Collaborated in a cross-disciplinary team with Product Designers (UX) and Software Engineers to build a customer-focused software application designed to reduce customer support inquiry for Shopify merchants in 24-hours, thereby enabling them to focus on personal business growth.

- Conducted market research on customer support analytics addressing customer pain points.
- Presented analytical findings and insights to the Shopify panelists, justifying the need for our solution.

Experience

Statistician Outlier

11/2024 to Current Toronto, Ontario

- Training generative artificial intelligence models in math by developing step-by-step mathematical methods, providing a summary leading up to the solution.
- Evaluating, assessing, and ranking the factuality and relevance of domain-specific text response produced by AI models.
- Crafting and answering questions related to statistics and linear algebra.

Barista

11/2024 to 01/2025 Richmond Hill, Ontario

Lovely the Café

- Quickly identified and resolved operational challenges during peak hours, such as optimizing order flow and minimizing customer wait times by reorganizing tasks.
- Managed time efficiently by balancing multiple tasks, including order preparation, customer service, and restocking supplies, during high-pressure shifts.
- Collaborated with team members to coordinate duties, share updates, and ensure seamless hand-offs during busy periods.

Teaching Assistant (Data Science Program) BrainStation

06/2024 to 07/2024 Toronto, Ontario

- Facilitated 30-minute live coding and review sessions in SQL and Python for 10 students, enhancing programming skills and problem-solving abilities.
- Evaluated deliverables, capstone project sprint submissions, and presentations, offering constructive feedback to support student development and improvement.
- Held office hours and one-on-one mentorship, effectively communicating core data science concepts, and providing support for personal and academic success.
- Participated in weekly retrospectives and stand-ups with the education team by providing actionable feedback for students.

Tutor 10/2021 to 12/2023 GettaTutor Toronto, Ontario

- Provided one-on-one tutoring for elementary and high school students in math and chemistry, improving their understanding and academic performance.
- Created targeted exam preparation material to build confidence for students to achieve their academic goals.
- Developed personalized student learning plans tailored to their specific needs, alongside course material.
- Communicated with parents to schedule meetings and discuss student progress, building strong interpersonal skills.

Undergraduate Researcher

09/2020 to 12/2020

Canadian Institute for Theoretical Astrophysics

Toronto, Ontario

- Utilized reconstruction algorithms to recover missing dispersion measure time series data over long timescales.
- Carried out a cross-correlational analysis in Python to address the possibility of gravitational microlensing caused by the interstellar medium.
- Collaborated with the research supervisor to discuss project updates and challenges, as well as brainstorm ideas for next steps.
- Presented analytical findings in the form of data visualizations to both technical and non-technical audiences, through a comprehensive slide deck, as well as a written report, ensuring proper understanding of research details.

Summer Undergraduate Research Program (SURP) Intern Dunlap Institute for Astronomy & Astrophysics

05/2020 to 08/2020 Toronto, Ontario

- Analyzed astronomical data on a new, state-of-the-art reconstruction algorithm, ensuring the reliability and dependability of reconstructed signals.
- Managed an assortment of data analytics and visualization tasks in Python, as well as progress reports, meeting project expectations with minimal supervision.
- Presented technical findings in departmental meetings, communicating results and implications to research professionals.
- Engaged in regular discussions with my supervisor to discuss methodologies to improve project outcomes and implement feedback.

Education

Masters of Data ScienceExpected in 08/2026University of PittsburghPittsburgh, Pennsylvania, United StatesCertificate, Product Management07/2024BrainStationToronto, Ontario, CanadaDiploma, Data Science04/2024

Diploma, Data Science

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BrainStation Toronto, Ontario, Canada

Certificate, Data Analytics 10/2023

BrainStation Toronto, Ontario, Canada

Honours Bachelor of Science, Specialist in Physics & Astrophysics 04/2023

University of Toronto, Ontario, Canada