

SUNG LIN(ARTHUR) CHANG

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EDUCATION

[Western University](#)

M.Eng. Communications and Signal Processing

- Cumulative GPA: 4.0/4.0

London, Canada
September 2022 - Current

[University of California, San Diego](#)

Bachelor of Science in Data Science, Minor in Economics

- Advanced GPA: 3.7/4.0 (Junior and Senior Year)

San Diego, USA
August 2017 - March 2021

PROFESSIONAL EXPERIENCE

[Ansys, Inc.](#)

Electronics R&D (Software Developer) Intern

- Spearheaded the development and continuous maintenance of the Ansys meshing simulation automated tester, leveraging Python and internal libraries. Automate testing of at least 10 individuals, resulting in a significant boost in productivity and efficiency.
- Identified 8 previously undocumented bugs in critical functions, contributing to improved software reliability and user experience.

Waterloo, Canada
August 2023 - Current

[D2L \(Desire2Learn\)](#)

Software Developer (Data Analytics) Co-op

- Implemented page-to-PDF functionality using JavaScript Highchart client side libraries.
- Revamped B2B BI templates for 3 teams to effectively monitor user activities and compliance status, while streamlined data segregation for seamless deployment in corporate environments.
- Designed and executed 5 data pipelines, seamlessly connecting AWS Quicksight, S3, and Athena.

Kitchener, Canada
May 2023 - August 2023

[Cyberbiz Corp.](#)

Data Engineer

- Developed 8 Flask backend BI APIs logic, providing over 2000 active online shops with automated analytics.
- Maintained and added ETL pipelines between BigQuery and MySQL database using crontabs, time scheduler and python, ensuring validity of both databases.
- Composed 21 SQL queries by extracting vital data used to train models, business analytic and examination of company's current financial trajectory.
- Automated python code linting with Darker and Pylint library using drone CI/CD.

Taipei, Taiwan
March 2022 - August 2022

[Cyberbiz Corp.](#)

Data Engineer Intern (Natural Language Processing)

- Fine-tuned BERT and implemented it alongside with a rule-based filter for binary classification and 190 categories multi-class classification; resulted in 92% F-1 score and 80% accuracy respectively while minimizing at least cost of 20 people in manual labor.
- Written and adjusted 26 SQL queries based on changes of the BI logic.

Taipei, Taiwan
June 2021 - February 2022

[Galaxy Software Services Corp.](#)

Assistant Python Software Engineer

- Utilized PyQt5 GUI library to compose an application for 8 APIs, generating companies 50,000 - 80,000 USD in revenue.
- Created a Control-M API that automatically translates excel instructions into json input and in reverse, currently used by an insurance company to eliminate manual input.

Taipei, Taiwan
July 2021 - June 2022

[Harvest Fund Management Co. Ltd.](#)

Data Lab Research Intern

- Critiqued code of Gated Recurrent Unit (GRU) deployed in company default trend prediction with ~65% accuracy.
- Devised an NLP classification model classifying product categories for all companies listed on the Chinese market and minimized 70% of manual labor.
- Developed a tree-structured sorting algorithm on the entire Chinese market singling out companies with huge upsides and decreased selection time by at least 80%.

Beijing, China
January 2021 - April 2021

PROJECTS

[Hotel Front Desk Management System](#)

- Leveraged Python Kivy GUI library, pySerial and MongoDB to create a hotel frontend management software that facilitates real-time monitoring of room status, daily transactions, and customer information.
- Distributed free demo version to 5 hotels for evaluation and feedback, demonstrating the software's effectiveness and potential for widespread adoption.

Taipei, Taiwan

SKILLS AND ASSETS

- Languages: Fluent in Mandarin and English; Conversational Proficiency in Min; Basic Spanish.
- Technical Skills: Python (Pandas, PyTorch, PySpark, Flask, Airflow), SQL, GIT, GCP, JavaScript, Java, Kotlin