Bryan Lee

612-513-8816 | bryanleeyensheng@gmail.com | linkedin.com/in/bryanleeyensheng | github.com/bryanlee882001 | website

Education

University of Minnesota, Twin Cities — Minneapolis, MN

Bachelor of Science in Computer Science, CGPA: 3.85/4.00 — *Aug. 2022 – May 2025*

Coursework: Data Structures & Algorithms, Database Design, Software Eng., Operating Systems, Program Design & Development

Experience

BFC Software Inc. — May 2024 – Present

Data Engineer Intern — *Minneapolis, MN*

- Designed, developed and deployed ETL data pipelines using **Apache Airflow**, **Amazon Web Service (AWS)** & **Python** to integrate and process inventory data from multiple warehouses.
- Utilized **AWS Elastic MapReduce (EMR)** & **Apache Spark** to optimize large-scale data processing for front-end reporting, achieving an **increasing 30% performance** for advanced inventory analytics.
- Automated the categorization of food items compliant with FSMA standards using Large Language Models (LLMs) in **AWS Bedrock**, enhancing traceability and **reducing contamination time by 40%**.
- Built and deployed analytical data models in **Data Build Tool (DBT)**, enhancing data accuracy for customer inventory insights in interactive dashboards built in **Preset** and **React Native**, leading to **an annual cost saving of $300k**.

University of Minnesota - School of Physics and Astronomy — Feb 2023 – Present

Software Developer, Astrophysics Undergraduate Research Assistant — *Minneapolis, MN*

- Led an interdisciplinary team to develop and deploy a **React.js** web application using **Docker** that facilitates real-time computation of spectral statistics and dynamic graph generation.
- Modernized and revamped data infrastructure of collected orbit data from NASA's Fast Auroral SnapshoT Explorer (FAST) satellite, automating the migration of **120+ million rows** into MySQL database and reducing data retrieval time by **80%**.

University of Minnesota - Distributed Systems Computing Group — March 2024 – Present

Undergraduate Research Assistant — *Minneapolis, MN*

- Contributed to research and development on Electrocardiogram (ECG) compression algorithms for pacemakers to enhance cardiac monitoring capabilities, developing a data management and plotting tool using **Python** to manage test ECG data.

Genus Technologies Inc. — May 2024 - August 2024

Solutions Analyst Intern — *Minneapolis, MN*

- Improved system maintainability by **30%** using Object-Oriented Principles to modernize legacy systems with **C#** & **VB.NET**.
- Refactored codebases to increase robustness and collaborated with cross-functional teams, leading to a **cost saving of $7,000** through seamless integration and deployment.

Keysight Technologies — May 2023 – August 2023

Software Development Engineer Intern — *Penang, Malaysia*

- Led the end-to-end development of a web application using **C#** and **ASP.NET** to automate inventory tracking and monitoring, driving a **30% reduction in inventory discrepancies**.
- Enhanced operational efficiency by **50%** through centralization of inventory data into **SQL Server** using **C#**.

Projects

AIMSES | *React.js, TypeScript, C++, Python, Node.js, Express.js, Docker, MySQL* — September 2023 – Present

- Developed **React.js** web app for computing spectral statistics and generating dynamic graphs for magnetospheric research
- Streamlined deployment process using **Docker**, for enhanced accessibility across research environments.

Uber Analytics Dashboard | *Python, SQL, Mage, Google Cloud Platforms (GCP)* — April 2023 – May 2023

- Developed end-to-end **ETL** analytics solution using **Mage** & **GCP BigQuery** for ride data retrieval and analysis
- Leveraged **GCP BigQuery** as a data warehouse for efficient data ingestion, transformation, & **Looker Studio** for data visualization

Technical Skills

Languages: C#, C++, C, JavaScript, TypeScript, Python, Java, SQL, IDL, HTML/CSS, Ocaml
Frameworks: React Native, React.js, Django, ASP.NET, Flask
Developer Tools: Docker, Git, Apache Airflow, Apache Spark, Apache Hadoop, DBT, MySQL, PostgreSQL, Preset, Postman, Kubernetes, AWS (Amazon Web Services: MWAA, S3, Redshift, EMR, Bedrock), GCP (Google Cloud Platform: Big Query, Looker Studio)