WANG Xuxin (Benjamin)

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TECHNICAL SKILLS

Languages: Python, Java, Javascript, Typescript, Golang, SQL, R, Web Programming (HTML5, CSS3)
Technologies: Redis, MySQL, MongoDB, Kafka, Airflow, Apache Spark, AWS, dbt, React.js, Node.js, Firebase

WORK EXPERIENCE

Backend Software Engineering Intern (Aug 2024 - Jul 2025)
CLERKIE.IO | *San Francisco Bay Area* **|** *Silicon Valley Series A Fintech Startup; AI-powered financial automation platform*

- Developed and deployed a **mission-critical Debt Recovery CRM** and Payment Portal with **Node.js** and **MongoDB**, enabling agencies to manage over **$1B in debt portfolios**.
- **Improved job success rate from 80% to 99.9%** by implementing retries with exponential backoff, and dead-letter queues in **Redis/BullMQ.**
- Implemented compliance automation (statute of limitations logic) to ensure regulatory adherence for enterprise clients including **Verizon and Wells Fargo.**
- **Engineered secure wire transfer pipelines** with **JPMorgan Chase** for ACH transactions, ensuring reliability and timeliness.
- **Optimized large-scale data processing workflows**, cutting report generation time by **73%** and scaling systems to tens of millions of transactions.
- **Integrated enterprise-grade payment gateways** (Payscout, Repay, etc.), boosting on-time payments by **31%** and expanding revenue collection.

Data Analytics Engineering Intern (Jan 2024 - Jun 2024)
SHOPBACK | *Singapore* **|** *Multinational e-Commerce Cooperation; Leading cashback rewards platform in Asia-Pacific*

- **Designed and managed** end-to-end ETL pipelines using **Apache Airflow, Spark, and dbt, MySQL**, improving reliability and reducing manual intervention by **40%**.
- **Developed first Geospatial BI system** using **Python, MySQL, and ML algorithms**, enabling zonal-level scaling and improving resource allocation efficiency by **80%**.
- **Optimized data models** with **dbt** and **SparkSQL**, improving query performance by **30%** and boosting analytics accuracy.
- **Executed zero-downtime migration** of **56M+ records**, ensuring seamless data integrity and system continuity.

Data Analyst Intern (Aug 2023 - Nov 2023)
QUEST– HIRE A HERO | *Singapore* | *Early stage startup; Request-based mobile platform matching freelancers to businesses*

- **Increased lead generation 5x** by developing automated web-scraping tools **with Python and Selenium.**
- **Automated data visualization pipelines** with **Pandas**, reducing reporting effort by 15+ hours weekly.
- **Drove product growth**, achieving **140% MAU** and **120% DAU** increase through data-driven insights.

Undergraduate Teaching Assistant **(2023 - 2024)**
NATIONAL UNIVERSITY OF SINGAPORE

- Taught programming fundamentals using Python through weekly tutorials with a class of 40 students.

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE
Bachelor of Science (Honors) in Business Analytics, Minor in Data Engineering **(Aug 2022 - Nov 2026)**

- GPA: 4.63/5 (Honors with Highest Distinction)

STANFORD
Management Science and Engineering (MS&E) (**2024 - 2025**)

PROJECTS

EduGap (Oct 2024 - Present) Project Link

- Built an AI-powered platform integrating **Google Gemini 1.5, LangChain, ChromaDB** to support student-teacher interactions.
- **Implemented semantic clustering (PCA, DBSCAN)** to analyze student queries and highlight common learning gaps.

Geospatial Analysis (May 2024 - Jun 2024) Project Link

- Optimized geospatial coverage using **custom radius algorithms** with **GeographicLib and geopy**, increasing relevant business capture by 30%.
- Developed hybrid custom search strategy using **clustering techniques like DBSCAN** to optimize API efficiency.
- Built a **scalable data pipeline** integrating Google Maps & OneMap APIs, processing **5,000+ locations** with rate limiting and deduplication, improving data accuracy by **40%**.