





DAVID WANG

5A Computer Science & Business Double Degree, University of Waterloo

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EDUCATION

University of Waterloo, Honours Bachelor of Computer Science

Sept 2018 – Aug 2023

Coursework: Computer Architecture, Algorithms, Numerical Computation, Operating Systems, Data Structures

Wilfrid Laurier University, Honours Bachelor of Business Administration (Finance)

Sept 2018 – Aug 2023

Coursework: Securities Trading, Investment Management, Financial Markets, Options & Futures

WORK EXPERIENCE

Perpetua, Software Engineer Intern



Sept 2022 – Dec 2022

- Engineered Google Ads product for launching ad campaigns from Amazon and TikTok Spark Ads that scaled to **\$20K** in ARR.
- Improved retrieval times by **200%** by implementing new local **Django** models for brands, orders, and campaign objects.
- Enhanced **Python** sync functions runtime by **400%** by reducing the number of calls made to Django objects.
- Implemented **SQL query** with parameters to dynamically generate **95%** of arbitrary customer performance data requests.
- Developed query and **React** flows to generate potential opportunities and launch **40%** of new campaigns with 1-click.

The Block Crypto, Data Engineer Intern



May 2022 – Jun 2022

- Created **5+** new custom tables using **Google Big Query** and SQL queries for institutional clients and research team.
- Improved performance of data validation scripts by **50%** by reducing the number of **REST API** to public datasets.
- Contributed to open-source digital asset databases to expand data availability to **94%** of the top 500 digital assets.
- Wrote weekly data newsletter to **200K** subscribers about noteworthy data metrics and offer justification for changes.

The Block Crypto, Research Analyst Intern



Jan 2022 – May 2022

- Leveraged blockchain explorers to produce **sixteen** due diligence reports for clients as part of digital assets team.
- Discovered **three** high-risk security concerns that used suspicious smart contract admin privilege implementations.

Ada, Software Engineer Intern



Jan 2021 – May 2021

- Developed **3** new quick reply and suggestions **React** components that reduced chat bot creation times by **15%**.
- Enhanced **Redux** state logic by introducing **9** new actions and reducers that facilitated the creation of 3 new dashboard blocks.
- Improved stability of the dashboard by **20%** by deprecating redundant **JavaScript** functions and refactoring Redux reducers.

PROJECTS

Backtest, Python

- Back-testing tool using **Yahoo Finance API**, **Backtrader**, and **QuantStats** libraries to analyze different technical indicators and simulate historical trading results. Trading outperformed S&P 500 by **30%** over the previous 5 years.

SKILLS

Languages: Python, SQL, JavaScript/TypeScript, C++, C

Technologies: Django, NumPy, Pandas, React, Redux

Tools: GraphQL, Git, Docker, Google Big Query, Google Cloud, Jupyter