Sunny Nie

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Coquitlam, British Columbia, Canada | personal portfolio

EDUCATION

University of British Columbia   Vancouver, BC
Bachelor of Science in Computer Science   *2020 – Expected 2025*
- Dean's Honour List with 90.4% cumulative average
- Relevant courses: Software Engineering, Relational Databases, Data Structures and Algorithms

TECHNICAL SKILLS

Languages: Python, SQL (SQLite, PostgreSQL), TypeScript/HTML/CSS, Ruby, Go (Golang), C, Java
Tools: Git, Selenium WebDriver, Linux, Postman, Jupyter Notebooks
Frameworks and Libraries: React, Solid.js, TailwindCSS, FastAPI, SQLAlchemy, Redux, Express.js, Ruby on Rails

EXPERIENCE

Software Developer co-op   Sept 2022 – Apr 2023
Clio   *Burnaby, BC (remote)*
- Developed and maintained a Ruby on Rails backend application with React and AngularJS frontend features
- Updated and integrated RESTful APIs for new features in the Outlook add-in and application frontend
- Created an admin report to find hundreds of erroneous records and fixed the cause with a scheduled admin job
- Leveraged my team to quickly build context to fix a critical bug with the Gmail add-in affecting thousands of users
- Led my team in updating our triaging middleware to route to a common Bugsnag bucket instead of custom buckets
- Wrote and maintained tests with RSpec for all backend changes and Jasmine and Jest for frontend changes
- Worked closely with our team's designer to implement a UI redesign for the Outlook add-in using React and Figma
- Independently resolved ATC issues by building clarity, implementing solutions with tests, and writing QA steps
- Engaged in documentation writing, led code-reviews and QA testing, and experienced in Agile development methodologies including Scrum and retrospectives

Software Developer   June 2022 – Aug 2022
Jimu Labs   *Victoria, BC (remote)*
- Developed components using TypeScript and React for an enterprise dashboard application
- Leveraged Insomnia to implement React hooks for CRUD functionalty from the front-end via forms and modals
- Translated Figma diagrams to React components using TailwindCSS, accounting for dark mode and viewport sizes
- Extensively used Git for version control by regularly pushed code to Github and maintaining and merging branches

PERSONAL PROJECTS

Trade Dashboard ⧉ | *Next.js, React, Redux, FastAPI, SQLAlchemy, Alembic, SQLite*
- Developed an ambitious feature-rich CRUD application from scratch to organize and analyze ongoing trade ideas
- Implemented a dynamic timeline view using vis.js to allow zooming, panning, and CRUD of trades on the timeline
- Built numerous features including a Kanban view, resizable and sticky details sidebar, and markdown support
- Created an analysis view to analyze snapshots of tweets to build a tweet report per user in my timeline

Twitter Snapshot ⧉ | *Solid.js, Selenium Webdriver, Go, SQLAlchemy, SQLite*https://portfolio-sunnymnie.vercel.app/works/twe
- Built a 2-part application to create snapshots of my current Twitter home-feed and display historical snapshots
- Persists my current Twitter homefeed to a SQLite database completely in the background while browsing Twitter
- Designed a dashboard application with Solid.js and Go backend to display saved Twitter snapshots

Trading Algorithms ⧉ | *Python, Jupyter, Pandas, NumPy, Matplotlib, SQLite*
- Analyzed numerous trading strategies covering mean reversion, cointegration, and machine learning
- Created algorithms for efficient backtesting, data visualizations with Matplotlib, and data persistence with SQLite
- Increased trade speed by 75% with thread pools to execute high-leverage future trades at the best prices
- Utilized time based sample weights, sequential bootstrap, fractionally-differentiated features, and ensemble models