Chao Zhang

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WORK EXPERIENCE

Nyble (Techstars NYC 2022)   May 2023 - Present
Founding Software Engineer   Vancouver
- Led payment flow refactoring, enhancing efficiency, and simplifying payment provider integration, resulting in a 50% increase in collection rate, generating over $15,000 in just one month
- Independently designed and implemented BI analytic solutions, optimizing data models, selecting BI tools, creating visualizations, and providing valuable insights for informed decision-making
- Successfully implemented a new subscription model and payment logic to facilitate subscription upgrades, resulting in an annualized revenue increase of over $20,000
- Played a pivotal role in the company's transition from a startup app to a Series A-ready app by developing and enhancing key features to elevate user experience and usability

Amazon   Apr 2022 - Apr 2023
Software Development Engineer   Vancouver
- Led the design, implementation, and testing of multiple large-scale APIs for a migration project within the Payment Methods Team, impacting 27 services across 8 organizations
- Conducted a thorough analysis of 7 core APIs within a legacy system, creating a high-level design for service migration that included architectural plans and time estimates, resulting in a 2-month acceleration of the project
- Identified and resolved various discrepancies between two major payment services, minimizing risks and ensuring a successful launch of the project

Statistics Canada   May 2021 - Sep 2021
Data Scientist Intern   Ottawa
- Contributed to the Personal Protective Equipment Project during the pandemic by maintaining and optimizing the data pipeline, resulting in a reduction of memory usage and running time by over 80%
- Improved efficiency of manual product classification by 90% by creating a Machine Learning classification model with an accuracy of 97%
- Managed weekly production tasks, including data preprocessing and ingestion, ensuring data quality and accuracy

SAP   May 2019 - Dec 2019
Agile Developer Intern   Vancouver
- Improved efficiency of the deployment scheduling process by 40% through collaborating on an internal Deployment Scheduling React Web Application to provide better visualization and manageability to the DevOps team
- Served as a Scrum Master, tracking team development progress, facilitating team progress, and ensuring adherence to agile principles
- Developed integration of SAP Conversation AI with SAP Analytics Cloud, acquiring knowledge in Natural Language Processing, and trained an AI bot to provide context-sensitive assistance to users
- Reduced incident resolution time and improved customer satisfaction by analyzing data and collaborating with cross-functional teams
- Maintained and managed the team's dashboard and regression test plans on a weekly basis

TuGo Travel Insurance   Jan 2018 - Aug 2018
Software Tester Intern   Richmond
- Improved workflow efficiency by 70% through the development of a microservice
- Built APIs and implemented business logic using the microservices architecture
- Identified 50% of the bugs, prioritized and fixed 80% of the flaws by monitoring weekly regression tests
- Developed and maintained automated testing for the majority of the company's RESTful APIs

PROJECT EXPERIENCE

Mock Interview Platform   May 2023 - Present
- Designed and implemented all technical components of a mock interview platform, enabling users to schedule and conduct interview sessions, access practice resources, and enhance their interview preparedness
- Developed a user-friendly interface for posting and scheduling interview sessions, fostering meaningful user interactions and engagement
- Integrated comprehensive interview practice resources, enhancing the platform's value as a valuable tool for interview preparation
- Technologies: **Node.js**, Typescript, **React**, **MongoDB**, Prisma

Movie Recommendation System   Jan 2021 - Apr 2021
- **Full-stack project** based on **Deep Learning**, including features like movie recommendation and rating predictor
- Designed and trained three recommendation models which are Content-Based, Item-item Collaborative Filtering, and Hybrid model
- Technologies: **PyTorch**, scikit-learn, Amazon S3, Amazon EC2, MongoDB, Docker, Flask

Deep Reinforcement Learning for Automated Stock Trading   Sep 2020 - Dec 2020
- Made several improvements on an existing paper that used deep reinforcement learning for automated stock trading

- Our improved agent increased the cumulative stock return by 33% and Sharpe ratio by 32% by changing the policy network and reward function
- Technologies: Stable-baselines, LSTM, TensorFlow, NumPy, Gym

Big Data Analysis And Visualization On Yelp Dataset   Sep 2020 - Dec 2020
- Went through the entire data processing cycle, including data collection, data cleaning, data preprocessing, exploratory data analysis, in-depth analysis, and visualization
- Drew insights from data and presented the results
- Technologies: **Spark**, pandas, Plotly Express, seaborn, JupyterLab

OTHER EXPERIENCE

Simon Fraser University   Sep 2020 - May 2021
Teaching Assistant
- Teaching Assistant for Data Structures & Programming and Introduction to Software Engineering

EDUCATION

Simon Fraser University   Sep 2020 - Dec 2021
Master of Science in Computer Science, Big Data   Burnaby
GPA: 3.74 / 4.00
The University of British Columbia   Sep 2015 - Aug 2020
Bachelor of Science, Combined Major in Computer Science and Statistics, Minor in Commerce   Vancouver
The University of British Columbia—**Dean's Honour List** (Sep 2016—Apr 2020)

TECHNICAL SKILLS

- Programming languages:

Java, JavaScript, Typescript, Python, SQL, R
- Libraries

React, jQuery, scikit-learn, OpenCV, Tensorflow, Gym, PyTorch
- Framework

Spark, Flink, Hadoop, MapReduce, Express, Spring, Mocha, Junit, Bootstrap
- Tools

AWS, Google Cloud, Azure, Git, JIRA, Docker, Kubernetes, Postman, Heroku, maven, Prisma
- Databases: MongoDB, MySQL, PostgreSQL, DynamoDB