Vivek Wadhwani

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Experience

Machine Learning Operations / Data Platform Engineer, ODAIA 🔗   May 2023 – present | Canada
- Contributed to a complex multi-month migration from MySQL to Snowflake with Dagster & DBT, architecting multi-tenant data environments that improved scalability and reduced storage costs by 50%.
- Championed the adoption of a new BI tool, designing building reporting frameworks and automating workflows to improve efficiency and optimizing cross-team productivity.
- Pioneered the development of a Snowflake-native app utilizing External Access Integrations and Secrets to build a managed ETL process, generating a new revenue stream for the organization.
- Led various optimization initiatives across the pipeline, transitioning from outdated technologies such as *Pandas* to more efficient solutions like *DuckDB*, resulting in a 92.8% reduction in processing time and a 95.7% decrease in costs.
- Spearheaded reorganization of a high availability dataset to AWS S3, by integrating the compute process into an AWS Step Function optimizing its utilization resulting in a remarkable 91.6% decrease in API response times.
- Initiated the development of internal tools for Quality Assurance personnel, aimed at streamlining their workflow. Employed Streamlit to create intuitive user interfaces facilitating daily manual tasks, thus improving operational efficiency.

Machine Learning Engineering Intern, Borealis AI 🔗   Sep 2022 – Dec 2022 | Canada
- Orchestrated the implementation of robust long-term storage capabilities within the internal Kubernetes (Openshift) platform, integrating Prometheus and Thanos for enhanced data management and analytics efficiency.
- Implemented a refined and streamlined mode of communication by integrating Slack notifications into the Jenkins pipeline.
- Successfully guided the seamless transition of the Infrastructure team to a cloud-based research service, optimizing costs and elevating developer productivity in alignment with machine learning workflows.

Software Engineering Intern, Amplify - Royal Bank of Canada 🔗   May 2022 – Aug 2022 | Canada
- Recognized as the recipient of the Best Business Value Award among 18 teams for spearheading a transformative project at RBC. Demonstrated exceptional ability to deliver measurable value at scale within a stringent 4-month cycle.
- Pioneered a groundbreaking linkage between Direct Investing and Online Banking, leveraging pre-existing technological foundations to enable clients to explore personalized investment opportunities based on their spending patterns.
- Handpicked for an intensive summer innovation program at the largest financial institution in Canada. Collaborated within a cross-functional teams to redefine the future of self-directed early-stage investing at the Royal Bank of Canada.

Software Engineering Intern, The BMS Lab - University Of Twente 🔗   Sep 2020 – Apr 2022 | Netherlands
- Enhanced developer productivity up to five times by implementing a CD pipeline via GitLab & Docker onto the university's Azure services and Linux servers.
- Architected a full-stack application in Vue & Express managing audio files and integrated the IBM Watson NLP API. Developed an Express & MongoDB backend service for an esports tournament system used by 80+ members.

Machine Learning Research Assistant,   May 2020 – Aug 2020 | Canada
Lassonde Undergraduate Research 🔗
- Leveraged pandas, sci-kit learn and libvsm in Python to generate a binary classification a model predicting fraudulent credit-card transactions capable of up to 97% accuracy while being highly scalable.

Education

Lassonde School of Engineering - York University,   Sep 2018 – Apr 2023 | Toronto, Canada
Spec. Hons. B.Sc, Computer Science 🔗
Relevant Coursework: Data Structures and Algorithms, Advanced Object-Oriented Programming, Intro to Database Systems, Software Design & Operating System Fundamentals.

Technion - Israel Institute of Technology,   May 2019 | Tel Aviv, Israel
International Startup Entrepreneurship 🔗
Selected among a group of eighteen students who embarked on a journey of self-development in the startup nation. By the end, the team had pitched to VC's gaining invaluable experience that validated interests in entrepreneurship.

Technologies

: AWS, Snowflake, MySQL, MongoDB, Dagster, DBT, Docker, Kubernetes, Prometheus, FastAPI, Python, FastAPI, Javascript, React