Avyay Agarwal

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TECHNICAL SKILLS

Languages: Python, Go, Java, Scala, C/C++, Swift, Ruby, JavaScript, Scheme, SQL

Data/ML: Apache Spark, Kafka, PostgreSQL, Redis, Elasticsearch, SparkML, Scikit-learn, TensorFlow, PyTorch

Web/Mobile: Typescript, Node.js, React.js, Django, Firebase, ARKit, CoreML, HTML/CSS

Others: Temporal, Airflow, Protobuf, Bazel, Docker, Kubernetes, AWS, GCP, Nomad, Bamboo, Consul, Git

Experience

Moveworks AI Feb 2024 – Present

Software Engineer

Toronto, ON

- Owned and developed a permissions platform handling 900+ req/sec using Golang, Python, OpenFGA on Postgres for permissions enforcement across all third party data
- Created a new permission ingestion pipeline consuming 700+ events/sec for ingesting and processing third party permissions using Kafka, Temporal, Airflow and AWS
- Planned and performed live migrations of all traffic to new permissions enforcement and ingestion systems without any security breaches or outages, maintaining 99.9% uptime and 24hr SLA
- Built permissions tooling to support engineering, customer implementation and support teams saving 10+ hrs/day

Rippling

Aug 2022 – Jan 2024

Software Engineer

Toronto, ON

- Owned the 401(k) suite of integrations ensuring regular processing of \$XXX Million in payroll, working across internal stakeholders, customers and 401(k) providers, using Python, Django and MongoDB
- Spearheaded an agile team of 3 to help run XX Million GBP in UK payroll pensions by designing and developing Rippling's UK pensions integration from scratch
- Developed metrics, alerting and automated mitigation flows to reduce on-call/support load by 30% while managing the highest customer ticket volume across my org
- Drove \$X Million in ARR by enriching third party integrations for customer cross-sell and retention

Tesla Sep – Dec 2021

Data Engineering Intern

Fremont, CA

- Developed a data streaming and reporting tool deployed globally across Tesla service centers using Python, React.js, Node.js, Docker and Kubernetes
- Scaled a dynamic API platform to allow 1,000+ req/sec using Python, Redis, Vertica, Docker and Kuberenetes
- Built an Apache Flink management tool to easily create, manage and deploy Flink jobs

Twitter Jun – Sep 2021

Software Engineering Intern - ML/Data

Toronto, ON

- Hardened ML pipelines to increase stability by 40% using Spark, BigQuery, Aurora on Mesos
- Migrated ML pipelines from on-prem to GCP using Apache Beam, Dataflow and BigQuery
- Developed multiple bot management and metrics generation workflows for c-suite reporting

Squarepoint Capital

Jan – May 2021

Data Engineering Intern

Montreal, QC

- Developed multiple ETL pipelines to support quant trading strategies across global markets using Python, PostgreSQL, GCP, Nomad and Bamboo
- Built and architected a search platform for data discovery across on-prem and cloud clusters using FastAPI, Elasticsearch, Docker, Kubernetes and GKE

Projects

Safeway | Java, Python, Google Maps APIs

• Developed an Android app leveraging Toronto Police Open Data to help users navigate using the safest routes and automatically send SOS signals if unsafe activity is detected

EDUCATION

University of Waterloo

Waterloo, ON

Hons. Bachelor of Computer Science with a minor in Economics

• President's Scholarship of Distinction | Dean's List - Fall 20, Fall 21, Winter 22

2017 - 2022