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Technical Skills

Programming & Frameworks: Python, Bash, JavaScript, TypeScript, Rust, Django, FastAPI, NodeJS, React, ChakraUI
Cloud & Infrastructure: GCP, AWS, Docker, Kubernetes, Terraform, Nomad
Data & Storage: PostgreSQL, Snowflake, Redis Server Stack, OpenSearch, DBT, DuckDB, Qdrant, Pinecone
AI & ML: VertexAI, Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), Vector Database Optimization
DevOps & Systems: CI/CD, Kubernetes Deployment, Celery, Microservices, API Development, Kong, Mulesoft, Authentication (Okta)
Scaling & Optimization: Distributed Vectorization, Ranked Fusion, Model Tuning, MLOps, LLM Fine-Tuning, Griptape

Core Competencies

- Full Stack • Backend • Frontend • Machine Learning • Data Pipeline Architecture
- Cloud Infrastructure • LLM Systems & RAG Implementations • Vector Database Optimization
- API Development & Integration • Technical Team Leadership • DevOps & CI/CD
- Microservice Architecture • Kubernetes Deployment • Database Migration & Management

PROFESSIONAL EXPERIENCE

Product Engineer, Sr | North | <https://north.com/> | Remote | [2023-Present]

- Designed and built a high-throughput, low-latency **Rust** based proxy/passthrough API gateway, introducing **sub-millisecond** overhead while adding unified logging, routing, and observability. Served as the core ingress for all external developer traffic at North, consolidating a previously fragmented API ecosystem for the company's payments platform.
- Architected, developed, internal Retrieval Augmented Generation (RAG), **multi agent microservice API and Platform with ranked fusion, FastAPI, Okta** security, Deployed versioned models using **VertexAI, HuggingFace**, for **model tuning**
- **K8s Terraform** deployment pipeline based **ELT Snowflake UDFs** for call transcripts using **NodeJS**
- **Multi tenant Redis Server** via **GCP Celery** cluster increasing document processing speed by 300% and reducing operational costs by 40%

Team Lead Software Engineer | Property Meld | <https://app.propertymeld.com/signup> | Remote | [2018-2023]

- Employee 6, pivotal role in scaling the company from its early stages to a thriving business, successful Series A & B funding rounds. In the last year, facilitated **1.7 million maintenance requests** and nearly **\$550M** in maintenance repairs.
- Established robust data pipeline via **Fivetran, Snowflake**, and **DBT**, streamlining data management processes, enhanced reporting capabilities, informing strategic decision-making for the company. Focusing on data driven product development
- Rewrote the entire stack to run in **Docker**, and **Kubernetes**, future move out of heroku.
- Developed key components and features for **Django** application, utilizing my expertise in **TypeScript, React**, and **Python**.
- Spearheading the adoption of an internal knowledge management system, which paved the way for our rapid expansion from 6 to 70+ employees and a **10x** increase in monthly recurring revenue (**MRR**).
- Authoring the public API, and comprehensive public API documentation, accessible at <https://docs.propertymeld.com/>, that facilitated seamless integrations with our partners and clients.
- Established sustainable development practices that eliminated weekend work
- Actively participating in the **hiring** and **onboarding** process for new engineers, fostering a strong and collaborative team culture
- Showcasing my versatility and initiative by developing a skunkworks mobile app using Expo, demonstrating our commitment to continuous innovation and staying at the forefront of industry trends.
- Leading a critical project to migrate our production PostgreSQL database from Heroku to Aiven.io, ensuring seamless data transfer and enhanced performance for our growing customer base.
- Organizing internal knowledge sharing lunch and learns, helped leadership identify a community grown talent pipeline

Software Engineer III | eBay | San Francisco, CA | [2016-2018]

- Created, maintained, and added features to tooling to train **machine learning** algorithms (**Conditional Random Fields**).
- Automated deployment of **Petabyte Scale** map reduce **Erlang** cluster, increased test coverage, and wrote integration tests.
- Rewrote **map-reduce** cluster for deployment on **Kubernetes, cgroups** and containers.
- Implemented an **ICAP squid proxy** server for crawling **JavaScript injection** • regular usage of **openstack**
- Maintained, Extended deployment automation through the use of **docker, fabric, jenkins**, github webhooks
- Built several tools to shuffle data between openstack, **Hadoop**, **knox-proxy**, **Teradata**, and the crawling system
- **RL, ML** for new product recognition, **large scale map reduction** for **KV ingestion 32 machine cluster, 1000 machine hadoop**

Education

Jack Reactor Graduate
BA Fine Arts (Painting)
Pursued Majors
Personal Interests

| Advanced Software Engineering Immersive
| Minnesota State University Moorhead
| BS Art Education • BSE Mechanical Engineering
| Gardening, Motorcycling, Snow, Rain, Sunshine, Tinkering, Mutual Respect

| Austin, Tx [2015]
| Moorhead, MN [2012]
| Fargo, ND [2007-2011]