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Technical Skills

Programming & Frameworks: Python, Bash, JavaScript, TypeScript, Django, FastAPI, NodeJS, React, ChakraUI
Cloud & Infrastructure: GCP, AWS, Docker, Kubernetes, Terraform, Nomad
Data & Storage: PostgreSQL, Snowflake, Redis, 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]

- 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
- Distributed vectorization of Large Language Models (LLMs) documents multi tenant Redis Server via GCP Celery cluster increasing document processing speed by 300% and reducing operational costs by 40%
- Worked with a team (5 people) and leveraged a wide range of technologies, including FastAPI, Griptape, Redis, PostgreSQL
- Delivered high-quality solutions with projected \$3.2M per year savings

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. My contributions include:
- 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]