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# **NICHOLAS ROBERSON**

SENIOR SOFTWARE | DATA ENGINEER

## **PROFESSIONAL SUMMARY**

As a Senior Engineer with over five years of experience, I specialize in back-end development, data engineering, and project management. I have led the development of innovative solutions at both of my previous companies, focusing on clear requirements and a user-centered approach. Notable projects include a low-latency, high-availability tracking and automation platform for indoor farming at Plenty, and cost estimation software for Kubernetes at Atomwise. Furthermore, I have proven expertise in managing large-scale data warehouses, effectively meeting the diverse needs of internal teams at both organizations. Overall, I excel in backend service/API development and data engineering, coupled with a strong ability to solve complex problems. My commitment to fostering team collaboration has been instrumental in delivering top-notch solutions.

## **EDUCATION**

2014 - 2018

Computer Science with Honors, Grinnell College

### **EMPLOYMENT HISTORY**

DEC 2021 - JAN 2024

#### Senior Software Engineer, Atomwise, San Francisco, California (Remote)

- Successfully implemented Atomwise's first terabyte-scale Data Warehouse utilizing DBT, Redshift, and Flyte. Created automated pipelines to integrate data from various sources (S3, Athena, RDS, etc.), achieving an end-to-end refresh time of under 45 minutes for over 200 tables.
- Collaborated with teams across Machine Learning, Engineering, CADD, and Biology to integrate the Data Warehouse into company-wide project tracking, ML model training, Data Analysis, and Spotfire (a BI tool).
- Played a key role in the development and improvement of over 75% of internal Microservices, enhancing user experience, tooling, and maintainability.
- Implemented a centralized CLI, encompassing 70+ internal tool deployments, supported by a robust CI/CD system. Reduced time-to-delivery by 75% and decreased incident reports by 40%.
- Developed a Kubernetes cost optimization tool utilizing Prometheus and AWS cost data, leading to a 20% annual reduction in cloud costs. This tool continues to provide valuable insights.
- Engineered core ML/AI execution pipelines using Python and Flyte. Decreased cost by 30%, reduced debugging time by minutes with better traceability, and improved overall speed.

AUG 2019 - AUG 2021

## Senior Software Engineer, Plenty, San Francisco, California

- Engineered an innovative platform using Akka Actor model to automate indoor farm operations at Plenty, orchestrating tens of thousands of daily machinery actions.
- Oversaw development and integration of low-latency (SLA 90% of 25ms) tracking software for Bay Area factory operations, managing project scope, requirements, and implementation.
- Implemented data warehouse using Stitch, DBT, Snowflake, and Sisense to support science, operations, sales, and board prep teams in serving their data needs.
- Led a team of contractors in the Apps and Data division, driving project milestones and deliverables.

JUL 2018 - AUG 2019

## Software Engineer, Plenty, San Francisco, California

- As an early team member, designed and developed Java and Python Microservices core to the companies operations, many of which are still in operation today.
- Initiated and led Plenty's Corporate Social Responsibility (CSR) team, guiding the company's commitment to sustainable produce.

## LANGUAGES

Python

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Java

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Typescript/React

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#### **SKILLS**

Data Warehouse: Snowflake, Redshift, DBT

Python Backend: Flask, FastAPI, Alembic, Redis, Celery

Java Backend: Spring, Dropwizard, jOOQ

DBs: RDBMSs, MySQL, Postgres, MongoDB

Tools: Pandas, Jupyter, DuckDB

Workflows: Airflow, Flyte, Prefect

AWS: EC2, S3, Athena, Glue, RDS, SQS, Lambda

API Design and Development

Project Management

Database Design and Optimization

Remote Workflow Development

Data/ML/AI Pipelines

#### LINKS

<u>LinkedIn</u> GitHub