

## CONTACT

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## **EXPERTISE**

Building SaaS products
Backend Development
Customer Obsession
Service Architecture
Engineering Culture
Mentoring

## **SKILLS**

**API** Design

AWS

Database Design

**Developer Productivity** 

GraphQL

Java/JVM

Kubernetes

NoSQL

 ${\sf PostgresDB}$ 

Python

# WRITING

"How I Work" Personal README
Personal Tech Blog

## **BONUS**

Eagle Scout

Amateur Wine Maker

Black Belt in Taekwondo

I've rock-climbed Half Dome

# PATRICK J. AULD

## STAFF SOFTWARE ENGINEE

I am a product-minded engineer with experience in startups and large companies. I have extensive experience building SaaS applications and platforms in hypergrowth environments. Several times, I have been the primary engineering leader for multiple teams. I can comfortably take on aspects of product management and be responsible for large projects end-to-end. I am open to Staff+ and CTO positions.

## **EXPERIENCE**

**Q** 2021 - 2023

**Flexport** 

#### STAFF SOFTWARE ENGINEER

- >> I designed and implemented a system for managing the digitization of logistics documents at configurable granularities to optimize cost and required accuracy. Ranging from simple OCR to Human-in-the-Loop AI services, it resulted in a dozen new supported document types that were previously not cost-effective.
- >> I designed and built a searchable graph of Flexport's logistics network. A single use case of the graph was on track for a 20% improvement in take rate at the time of my departure. The graph allowed automated, cost-aware (re)routing, shipment optimization, and journey-agnostic quoting.

2019 - 2021

Autodesk

#### **SOFTWARE ARCHITECT**

- >> I was responsible for web, mobile, backend platforms, development workflows, AWS Infrastructure, and quality tooling. Eight teams of ~60 developers total reported to my group.
- >> I and the teams I directed are responsible for the strategy and execution of integrating PlanGrid into Autodesk ecosystems.
- >> I developed company-wide guidelines for all Autodesk SaaS products as an Autodesk's Production Readiness Program steering committee member.
- >> To encourage broader thinking and empathy with the teams we served, I created an employee rotation program for ICs to try new positions temporarily.
- 2017 2019

PlanGrid | Autodesk purchased PlanGrid in December of 2018

#### ENGINEERING MANAGER

This position spans PlanGrid and Autodesk

- >> I worked with internal teams to find problems that crossed their team boundaries or impacted large parts of the engineering organization.
- >> The team developed distributed tracing tools, implemented a service mesh using Istio, rebuilt auth to enable an easier transition to microservices, and owned shared services.
- >> To enhance developers' abilities of available tools, I organized a recurring event that invited PlanGrid's vendors onsite for training and development.
- >> I also had the pleasure of being the first to document PlanGrid's PIP process.
- >> In a fun twist, just weeks before starting this position, I told my manager I never wanted to be in management. It ended up being a great experience.

#### SYSTEMS ARCHITECT

- >> I led our migration from Heroku to Kubernetes on AWS, saving >\$50k monthly costs.
- >> I designed processes, frameworks, and tools to break our monolith apart. Resulting in more than 60% of teams developing independent services within six months.
- >> I created cross-team groups and events to enable the sharing of ideas without negatively impacting development velocity, all while PlanGrid doubled its engineering headcount twice in 18 months.

# **EDUCATION**

Bachlors Computer Science University of California, Santa Cruz

# LINKS

#### Github

https://github.com/PatrickAuld/

X (Twitter)

https://x.com/patrickauld

LinkedIn

https://www.linkedin.com/in/patrickauld/

2013 - 2017

Birst

#### LEAD SOFTWARE ENGINEER

>> I designed and wrote authentication and edge proxy services as part of an SOA migration. Resulting in the monolith being broken into multiple services with no downtime.

>> I designed and built a DSL-based testing harness for integration and systems tests that allowed non-technical teams to write tests covering all key custom workflows.

2011 - 2013

DOMO

#### SOFTWARE ENGINEER

>> I designed and built the steaming data pipeline, which loads data and performs ETL transforms through plugins developed in-house and by external teams.

2007 - 2011

Elasta

#### SOFTWARE ENGINEER

>> I built a Cloud normalization API and SDK to allow services to be agnostic of the underlying platform. If that sounds hard now, try it in 2007.

2007 - 2007

**NASA** Ames

#### SOFTWARE ENGINEER

>> Collaboration with Google on <a href="https://moon.google.com">https://moon.google.com</a>

2006 - 2007

University of California, Santa Cruz

#### RESEACH ASSISTANT

>> I developed a method for tracking human movement in the presence of bulky clothing and using standard cameras such as those found in security systems.