

# Peter D'Elia

📍 Charlottesville, VA ✉️ [petertdelia@gmail.com](mailto:petertdelia@gmail.com) 🖱️ [peterdelia.com](http://peterdelia.com) **in** [linkedin.com/in/peter-delia](https://linkedin.com/in/peter-delia)

## Profile

---

I am a product-minded software engineer with years of experience in production systems for high-growth SaaS startups, including multi-tenant enterprise software. I am motivated by the challenge of solving hard engineering problems and simplifying complex systems. I also built Dendro, an open source system monitoring framework built using AWS services, and intended to be used by small, distributed applications.

## Experience

---

### Senior Fullstack Cloud Engineer, *Thread*

2023 – present

- Infrastructure and observability: Tuned retry logic to increase deployment resilience; Improved observability of core API services through improved logging and metrics collection. These changes decreased the amount of time spent debugging.
- API development and eventing: Built new endpoints; modified existing endpoints; co-designed and implemented real-time protobuf events, shipped through Kafka, to be consumed by auxiliary services.
- Developer velocity and experience: Integrated strict go linter and formatter to enforce stylistic consistency and reduce time spent bikeshedding; wrote tools to decrease time spent on repetitive developer activities.
- Major technologies used: Go, Kafka, Protobuf, Docker, Hashicorp Nomad, Grafana, sqlc, sql-migrate

### Software Engineer, *Apartment List*

2021 – 2022

- Worked on Typescript/React frontend, Ruby/Rails backend, Python/Airflow and Protobuf ETL/data pipeline in core business product area
- Led a team to develop code-generation tool automating Protobuf message creation for our real-time event pipeline
- Led the frontend migration from Mapbox to Google Maps, designed and implemented abstraction layer between vendor and custom map code.
- Designed and implemented performance improvement in Google BigQuery/Airflow/3rd party API data pipeline that resulted in 7x performance increase in data throughput
- Led initiative to develop high-level documentation for how Apartment List's service architecture enables its business model

### Co-Creator, Software Engineer, *Dendro*

2021

- Created Dendro, ([getdendro.com](http://getdendro.com) ) an open-source, serverless monitoring framework for small, distributed applications.
- Designed, prototyped, and built Dendro using Node.js and AWS services (IAM, Kinesis Firehose, Lambda, Timestream, SNS, S3, CloudWatch).
- Automated AWS infrastructure deployment and teardown (TypeScript, AWS SDK)
- Authored technical case study ([getdendro.com/case-study](http://getdendro.com/case-study)) describing the difficulty of monitoring distributed systems, how Dendro was designed and built to solve this problem, and engineering challenges.

- Designed and implemented async exponential backoff code as a solution to AWS's optimistic response object, making pipeline deployment more responsive and resilient.

**Fullstack Developer, Self-employed**

2018 – 2021

- Jello: A kanban board app built with MongoDB, ExpressJS, and React/Redux.
- RequestBean: A request bin app built with Ruby on Rails and Postgres.
- Airlines App: A flight routes application built using ExpressJS and ReactJS.

**Skills**

---

**Languages** (JavaScript, Ruby, Golang, TypeScript, Python, SQL)

**Frameworks** (Airflow, ReactJS, Rails, Redux, ExpressJS, Flask)

**Misc. Skills** (Git, Github, Linux, RESTful APIs, HTTP, OOP, PostgreSQL, MongoDB)

**Cloud Technologies** (AWS: Kinesis, IAM, Lambda, S3, Cloudwatch, Timestream, SNS, DigitalOcean Droplet, Heroku, GCP, Google BigQuery)

**Education**

---

**University of Virginia, Ph.D.**

2016

Doctorate in music history, dissertation on Beethoven's music in its context.

**Harvard University, B.A.**

2007

Bachelor of music. Piano performance, history, theory, composition.