

# Josh Holbrook

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## Employment History

Procore Technologies, Embedded Site Reliability Engineering  
Staff Software Engineer

August 2022 - Current  
Remote

- Led embedded engagements to accomplish infrastructure milestones
- Became a subject matter expert and evangelist for SLOs
- Collaborated and drove consensus among technical leaders
- Led development on an ETL framework for operational insights in TypeScript
- Offered operational support for Terraform
- Developed a circuit breaker to disable file uploads when NFS was unavailable
- Acted as first-line on-call for core application

Eaze, Core Services  
Staff Engineer

October 2021 - August 2022  
Remote

- Added OpenTelemetry support to the boltzmann framework, preparing boltzmann services for migration from Honeycomb beelines
- Developed a migration toolchain and pipeline for SQL Server, improving safety and speed of .NET development
- Made recommendations for hiring decisions and process changes, many of which management adopted

DoubleVerify, Social Integrations  
Staff Data Engineer

July 2020 - October 2021  
New York NY

- Led project to develop a greenfield hybrid streaming/batch pipeline, shipping an MVP in only 7 weeks and scaling to tens of millions of content items
- Developed an internal data engineering framework with a focus on first-class PyCharm support, confidence in correct code and rapid development
- Owned the Engineering Bi-Weekly meeting, where engineers shared department-wide updates and gave regular presentations
- Mentored and trained other engineers on the team through pair programming, documentation and videos

Squarespace Inc, Finance Products  
Senior Software Engineer

July 2019 - January 2020  
New York NY

- Supported and maintained financial data pipelines used for ASC606 revenue recognition, cash and tax reporting and financial planning for a multi billion dollar web site host
- Spearheaded proposals to onboard billing and payments data onto a data vault reference architecture to improve velocity and decrease bugs, and to rearchitect reporting to mirror industry standard BI tools
- Designed and instituted an on-call process to ensure that support work was spread evenly

Gizmodo Media Group, Data Engineering  
Senior Developer

September 2016 - May 2019  
New York NY

- Acted as the technical lead to deliver Amazon affiliate program commerce analytics involving three teams and multiple contractors, providing experiment data used to optimize conversions on a front page redesign
- Owned internal analytics and recommendation systems that served over 100 million users a month; overhauled legacy systems and implemented monitoring, vastly decreasing total outages and virtually eliminating undetected outages
- Architected an A/B testing API so experiments could be configured with a web UI instead of disparate scripts
- Designed, built and maintained ETL jobs for a rapidly-growing data warehouse using Python, AWS RedShift and Looker
- Ported the organization's microservice framework from Scala and Play to Python and Flask to enable development of services by the data team
- Mentored junior employees on the team

Condé Nast, Copilot API  
Software Developer

February 2014 - August 2016  
New York NY

- Worked on the team that launched Vogue Runway's real time fashion show coverage during New York Fashion Week, including leading a data migration that replatformed over a decade of content
- Wrote HATEOAS-inspired graph-capable content relationships API that supported the data modeling needs of over a dozen brands using Condé Nast's all-new internal CMS

i.TV LLC  
Software Engineer

August 2013 – November 2013  
Provo UT

- Developed new features and debugged memory leaks in internal content creation and management tools with CoffeeScript and AngularJS to enable real-time creation and curation of live content created over the course of a full TV episode

Nodejitsu Inc  
Head of Support

July 2011 – December 2012  
San Francisco CA

- Managed and trained other support engineers
- Monitored support channels such as IRC, email and Twitter for support requests
- Triaged and investigated live production issues with Nodejitsu software, servers and cloud providers
- Maintained, fixed bugs and made releases of modules in the Flatiron framework and Nodejitsu's open source software
- Developed and maintained internal support infrastructure and tooling

## Education

Master of Science, Mechanical Engineering  
University of Alaska Fairbanks  
Thesis: *The Determination of Anisotropic Thermal Conductivity with Thermal Needle Probe Measurement*

September 2009 – May 2011  
GPA: 3.62

Bachelor of Science, Mechanical Engineering(Minor: Mathematics)  
University of Alaska Fairbanks

August 2005 – May 2010  
GPA: 3.67

## Projects

pyee ★211

July 2011 – Current

A Python port of the Node.js EventEmitter with special support for concurrency and async frameworks

old memes

July 2011 – Current

An old school Node.js anti-framework, built around classic era Node.js modules, developed as a labor of love over the last decade

plusdeck

October 2023 – Current

Reverse engineered protocol documentation and tools for the Plus Deck 2C PC Cassette Deck

Matanуска BASIC

June 2022 – Current

An ongoing project to learn how to write a BASIC interpreter

korbenware

April 2019 – June 2023

A Linux desktop management suite using Python and bash, which includes an implementation of XDG autostart, an application launcher, and an XDG menu TUI

coprctl

June 2023

A wrapper around copr-cli that affords a kubernetes-inspired IaC interface for COPR

omsxctl

August 2022

A CLI tool for controlling the openMSX emulator over its socket API

PSeudo

April 2020

A PowerShell module for privilege escalation using named pipes and .NET binary serialization

twisted\_ipython

June 2019

An IPython extension using Crochet that enables Twisted autoawait support in IPython and Jupyter notebooks

IHydra ★9

January 2020 – February 2020

A Jupyter kernel for hydra, a video synth written in JavaScript using WebGL, using code from the IJavaScript Jupyter kernel, Electron and React

ecstatic ★912

November 2011 – May 2019

A fully-featured static file serving middleware for Node.js

## **Skills**

**Languages:** Bash, JavaScript, TypeScript, PowerShell, Python, Scala, Rust, Go

**Operating Systems:** Ubuntu Linux, Fedora Linux, Raspberry Pi OS, MacOS, Windows

**Cloud Platforms:** AWS, GCP, DigitalOcean

**Databases:** PostgreSQL, MySQL, SQL Server, BigQuery, RedShift, Vertica, SQLite, CouchDB, MongoDB

**Frontend Engineering:** CSS, HTML, Django, Express, React, Electron

**Backend Engineering:** NGINX, Flask, Node.js, Redis, asyncio, Twisted

**Data Engineering & Data Science:** Airflow, Spark, Jupyter, LookML, Kafka, Pandas, Data Warehousing, Numerical Methods

**DevOps:** Ansible, Terraform, DataDog, NewRelic, OpenTelemetry, Prometheus, Docker, GitLab CI, CircleCI, Kubernetes, systemd, Vagrant, SLOs

**Leadership:** Consensus Building, Decision-Making, Mentorship