

# Spencer Pearson

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## EDUCATION

### U. WASHINGTON

#### MASTER OF SCIENCE

Computer Science

GPA 3.72; 2015–2017

Concentration: Software Engineering

### UC SANTA BARBARA

#### BACHELOR OF SCIENCE

Physics, Computer Science

GPA 3.98; 2010–2015

## SKILLS

### Expert in

- Python
- Go
- TypeScript
- Bash
- Git

### Proficient with

- Java
- JavaScript
- Rust
- Haskell
- SQL
- GCP

### Non-software

- Physical sciences
- Statistics

## EXPERIENCE

### MATRICES.AI | SENIOR SOFTWARE ENGINEER (CONSULTING)

Jun 2024 - Present

- Designed and implemented a new storage system for all their app's data, enabling customers to store >10x larger documents, with better performance
- Built infrastructure for crafting and running evaluations of computer use agents

### WEIGHTS & BIASES | (SENIOR) SOFTWARE ENGINEER

Jan 2022 - (Jan 2023) - Jan 2024

- Identified a class of serious auth vulnerabilities, developed tooling to systematically fix them. Multiple devs loved the new system; none complained.
- Rearchitected ingestion of run-data, the app's lifeblood and oldest and crustiest ingestion flow, to greatly increase scalability and support newly-necessary forms of parallelism
- Architected and implemented much of a new storage backend for run-data, transforming multiple major customers' experience from "almost unusably slow" to "quite snappy"
- Mentored multiple junior engineers

### GOOGLE | SOFTWARE ENGINEER

Jul 2020 - May 2021

- Designed a service to let BigQuery devs instantly load TB of data into experimental instances for ad-hoc testing
- Set up resource monitoring/alerting, preventing multiple multi-hour client-team-blocking outages every week

### DROPBOX | SOFTWARE ENGINEER

Jan 2018 - Jul 2020

- Built a metrics pipeline that ingests >10M samples/min and lets other Dropbox developers run complex queries on their data in near-real-time
- Architected and implemented a highly available job-execution service, to generate and send reports based on that pipeline's data
- Designed and implemented the client behavior that ensures timely, customizable metric-reporting without risk of DDoS

## PROJECTS

### BIATOB | WEB APP TO HELP PEOPLE CLARIFY THEIR BELIEFS

[biatob.com](https://biatob.com) · [github.com/speezepearson/biatob](https://github.com/speezepearson/biatob)

- Helps people assign probabilities to their beliefs and offer bets to their friends
- Skills used: Python, Elm, Protobuf, MySQL; UI design, system design

### BROWSERGUI | ULTRA-PORTABLE PYTHON GUI LIBRARY

[github.com/speezepearson/browsergui](https://github.com/speezepearson/browsergui)

- Runs a GUI in the only frontend every computer has: a browser
- Works out-of-the-box on every major OS / Python version
- Extensively documented