

Spencer Pearson

Last Updated on 25th February 2025
github.com/speezepearson/resume

speezepearson.github.io

github.com/speezepearson

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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

EXPERIENCE

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"

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 · 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

- 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

PUBLICATIONS

EVALUATING AND IMPROVING FAULT LOCALIZATION

2015 - 2017 | tinyurl.com/srp-fl-paper

- Led a six-person research team over two years
- Developed a novel class of automated debugging tools, 20% more accurate than existing techniques
- Demonstrated a systematic methodological flaw in nearly all existing fault localization research
- Won 3rd place in the 2016 ACM Student Research Competition