THOMAS MANNING

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Skills

Languages

- + Python
- + Rust
- + C/C++
- + Go

- + Java
- + Haskell

Software

- + Linux/Unix
- + Bash
- + Git
- + SSH+tmux/screen
- + Vim
- + Inkscape

Disciplines

- + Distributed Systems
- + Storage Systems
- + Site Reliability Engineering
- + Functional Programming
- + Data Analytics
- + Testing!

Technologies

- + Shell Scripting
- + Regexes
- + Time Series DBs
- + Google Cloud
- + SQL

Work Experience

Google

SRE - Persistent Disk, Dublin, Ireland — Mar 2016 - Present

- + Developed our SLOs and built a culture around using them for engineering decisions within the team.
 - + Lead for a product-wide effort which achieved an order of magnitude reduction in SLO burn in our device availability SLOs, significantly reducing customer pain.
 - + Became SRE TL in 2020Q2. I brought up another SRE TL as the team grew.
 - + Helped build the SRE team from 9 to 25; mentored many new teammates.
 - + Led team roadmap development; split team into smaller work groups for more local decision making and planning as it grew.
 - + Team monitoring guru: wrote much of our instrumentation, monitoring, alerting, and dashboards.
 - + Worked on safe launches (and landings) of Regional Persistent Disks, device clones, PD-Balanced/Extreme, and more.
 - + Built dashboards and FAQs for customer support; improved public docs.
 - + Gave dozens of trainings and tech talks for PD and other teams.
 - + The basics: code reviews, design doc reviews, consulting, oncall.

Drone Aviation Corp

Software Engineer Contractor, Jacksonville, Florida — Jul 2015 – Feb 2016

- + Wrote a Ground Control Station (GCS) for drones as a RESTful web server.
- + Wrote code to operate a camera, using a binary protocol, with a gamepad.
- + Created a web-based UI for the GCS and camera.

Education

BS: Computer Science

University of Central Florida December 2014

Favorite Courses

- + Artificial Intelligence
- + Parallel Processes
- + System Software
- + Programming Languages



Interests

Cognitive

- + Distributed Systems
- + Functional Programming
 - + Mathematics
 - + Automation
 - + Parsers
 - + Coding Theory
 - + Wikipedia Spelunking

Less So

- + Bouldering
- + Swimming
- + Hiking
- + Video Games
- + Puns

≥ Neat Hobby Projects

Reed-Solomon Encoder/Decoder 2020

A Reed-Solomon and Shamir's secret sharing algorithm encoder/decoder.

- + Code in Github for Reed-Solomon and Shamir's.
- + I also gave a presentation at work on the theory behind Reed-Solomon for fun.

Fizzbuzz 2017

I did a fizzbuzz! Written in a toy language I made.

- + I wrote a small parser combinator library in Haskell (inspired by Parsec).
- + Then, I created a simple interpreted language called Rosy Boa.
- + Finally I wrote a fizzbuzz in Rosy Boa.