

# Robert Pirtle

Full-stack software engineer interested in solving meaningful problems with secure, agile infrastructures in an ethically-positive environment.

## SOFTWARE ENGINEERING EXPERIENCE

### IGNW | Software Engineering Consultant

APRIL 2020 - JULY 2020 | Portland, Oregon

- Developed a progressive web application written in Typescript & React on the Azure Cloud as part of a small, Agile team. Application was a inventory management solution for a Fortune 25 company
- Owned the image & document management features:
  - Backend API microservice architecture in Express interfacing with Azure Cloud's Blob Storage & CosmosDb (mongoDb)
  - Frontend components & UX written in React with Material-UI and EmotionCSS
- Used React's Context & Hooks APIs to implement PDF features: printing & generating PDFs from React components; displaying PDFs in-app as React components
- Utilized test-driven development practices to implement repeatable & maintainable patterns for Express APIs with integration tests
- Interfaced directly with clients: Demoed end-of-sprint progress to project stakeholders; Clarified & disambiguated business requirements
- Acted as point-of-contact for technical support of client's development team for cloud environment pipelines & integration

### Performance Logic | Applications Engineer

MARCH 2017 - MAY 2019 | Portland, Oregon

- primarily coding in PLScript, a scripting language we wrote and maintained in C

- Development lead on hospital-auditing data collection and reporting
- Integrated and subsumed a custom tool into a new & configurable solution; ~30% of the value of one of our largest contracts
- Implemented report caching with SQLite, increasing load speed >100x
- Designed and built password reset feature, automatically resolving 25% of client service interactions, ~\$75k/year in opportunity costs
- Discovered & closed various attack vectors and established process to prevent similar bugs. Notably, a username & email enumeration bug, and another that allowed for arbitrary code execution on our servers
- Mentored new developers and documented language & API features
- Revived a defunct unit & integration testing framework into a fun-to-use, automated tool
- Resident Git Wizard, helped transition from RCS version control to git
- Created various efficiency-bolstering and quality-of-life tools for developers and client services: *Chat bot*, *data-aggregation shell scripts* for healthchecks and updating docs, customizable *code-cleanup tools*
- Made extensions & fixes to proprietary scripting language's C++ code

Location: Portland, Oregon

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Github: [@pirtleshell](https://github.com/pirtleshell)

## EDUCATION

B.A., Physics with honors,

Cum Laude & Class

Commencement Speaker

Mathematics Minor

Galactic Astrophysics Thesis

Lewis & Clark College, 2014

Portland, Oregon

## BACKEND & SERVER ADMINISTRATION

Azure Cloud, Nginx, Apache, NodeJS, Docker, Javascript (ES6), Typescript (webpack), Python (Django, data analysis & plotting), serverless and static site generators, admin tasks (bash, cron, ssh/sftp)

## FRONTEND MANAGEMENT

NextJS, Gatsby, React.js, Vue.js, Angular.js, Flux/Redux/Context, CSS3 (flexbox, grid), CSS-in-JS, Sass/SCSS, Less, templating engines (JSX, Pug)

## DATABASE INFRASTRUCTURE

MongoDb, MySQL, sqlite3, PostgreSQL, Oracle, GraphQL, Redis, other NoSQL solutions

## TESTING & CODE QUALITY

Javascript/Typescript (mocha, jest, eslint, prettier), Python (pytest), custom language & API testing, OpenAPI, RAML

## FUN FACTS

[A Cappella](#)

Fluent in Spanish

I'm an Eagle Scout.