# Robert Pirtle

Full-stack-leaning-backend engineer who likes solving meaningful problems with secure, agile infrastructures in an ethically-positive environment.

#### SOFTWARE ENGINEERING EXPERIENCE

### **EnergyRM** | Backend Engineer

AUGUST 2020 - PRESENT | COVID remote from Portland, Oregon

- Created backend for early-stage startup in clean energy fintech sector
- Enhanced patented thermodynamic modeling engine with improved data aggregation & new energy sources for predicting energy usage
- Owned GraphQL API schema design & TypeORM database entities in Postgres with Typescript. Established workflows for communicating significant changes to the whole team & establishing buy-in
- Managed AWS infrastructure & bug report triage. Published GUI for viewing Redis job queue with a Google SSO authorization flow
- Developed full-stack an encrypted URL-signing pattern for document uploads in S3 with drag-&-drop powers on the frontend in React
- Integrated with 3rd party sources for importing building & utility bill data, calculating geographic energy rates, & determining weather
- Championed a spirit of refactoring to continually improve code health, extensibility, maintainability, & readability

## **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 infrastructure: Backend API microservice architecture in NodeJS & Express interfacing with Azure Blob Storage & CosmosDb (mongoDb)
- Interfaced directly with clients: Demoed 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
- Mentored new developers and documented language & API features

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#### **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

#### **Cloud Infrastructure:**

Azure & AWS (ECS, Fargate, S3) NodeJS / Typescript / Javascript Python data analysis & plotting Serverless & static generators Docker, Apache, Nginx Admin tasks (bash, cron, ssh)

#### **FRONTEND MANAGEMENT**

NextJS, Gatsby, React.js, Vue.js, Angular.js, CSS3 (flexbox, grid), CSS-in-JS

#### **DATABASE INFRASTRUCTURE**

PostgresSQL, MongoDb, Redis, GraphQL, MySQL, sqlite3, Oracle, 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.