

Matthew Purdue

Software Engineer
Open to Relocation

(503) 871-1824

mpurdue0312@gmail.com

[linkedin.com/in/matthew-purdue](https://www.linkedin.com/in/matthew-purdue)

<https://www.matthewpurdue.com/>

B.S. Software Engineering · Oregon Institute of Technology · Minor: Applied Mathematics · President's List · **2022 – 2026**

PROJECTS

Clear Scan — X-Ray ML Analysis · Senior Year · Individual Capstone

[PyTorch](#) [ResNet-50](#) [CNN](#) [Python](#) [PySide6](#)

- › Designed and trained a ResNet-50 CNN to detect anomalies in chest X-ray images — 93% accuracy
- › Managed the full ML pipeline independently: model training, hyperparameter tuning, evaluation, and iteration
- › Produced complete software engineering documentation including Use Case Models, Class Specification Models, and Sequence Diagrams, demonstrating the end-to-end SDLC

Flight Path — Campus Navigation · Junior Year · Team of 5

[React Native](#) [Firebase](#) [Android](#) [Agile](#) [Jira](#)

- › GPS navigation system for the Oregon Tech campus with both outdoor wayfinding and indoor building navigation, delivered as a cross-platform Android mobile application
- › Personally build the Dijkstra's algorithm for interior navigation and connected the Firebase database
- › Designed and implemented a client-server architecture with React Native on the frontend and Firebase on the backend, integrating real-time map data and building floor plans
- › Practiced full Agile methodology over a yearlong project: ran 3-week sprint cycles, rotated Scrum Master responsibilities, and managed features, user stories, and tasks in Jira

Tip Calculator for Android · Summer 2024 · Solo

[Kotlin](#) [Android Studio](#) [Google Play](#)

- › Built and published to Google Play with internal/external testing pipeline and version control lifecycle
- › Independently researched and learned Kotlin from documentation

Gear Locker · Spring / Summer 2026 · Solo

[C#](#) [HTML](#) [ASP.NET](#) [MySQL](#)

- › Independently designed a virtual locker to track my personal outdoor gear
- › Tracks damage, where I purchased the item, warranty information, and other key statistics all stored in a MySQL database

EXPERIENCE

Outdoor Program Equipment Manager | Oregon Institute of Technology — Klamath Falls, OR Oct 2024 – June 2026

- › Built software to automate program outreach and statistical reporting
- › Directed logistics for 50+ person overnight, outdoor trips, taught outdoor skills (skiing, spelunking, backpacking)
- › Initiated vendor partnerships saving over \$2,400 in equipment costs

Orchard Laborer | Private Farm — Klamath Falls, OR Spring 2023 – June 2026

- › Operated heavy machinery (auger, stump remover); managed irrigation installation and ongoing mechanical diagnosis and maintenance

Driver & Pizza Maker | Garlic Jim's — Salem, OR Summer 2023 – 2024

- › Updated and maintained point-of-sale; cashiering, new-hire training, customer service, closing duties