

Matthew Tran

Beaverton, OR | (971) 407-0798 | matthewatran7@gmail.com
[linkedin.com/in/mtran7](https://www.linkedin.com/in/mtran7) | github.com/Matttran7

University of Portland | **BS Computer Science**
Graduated - May 2024

SKILLS

Languages | Java, Python, C#, SQL, C, C++, Git/GitHub, JavaScript, HTML, CSS, R, PHP

Technologies | .NET, Cassandra, Hadoop, AWS RDS, Azure SQL, Docker, NodeJS, React

Development Tools | Unix/Linux, Visual Studio, Eclipse, JIRA, Android Studio

Topics | ML, AI, Neural networks, Databases, ETL, Algorithms, Data structures, Parallel Computing, Software testing, Operating systems, Web development, Software development, Agile development, Business Finance

WORK EXPERIENCE

Machine Learning Researcher | *University of Portland*

Portland, OR | June 2023 - June 2024

- Developed an AI system for constructing cognitive agents to emulate natural animal behavior by replicating both sides of the brain using deep learning and neural networks in C# and .NET.
- Improved agent exploration by 33% with fitness functions, upgraded monitoring with matplotlib.
- Integrated multi-node cluster Hadoop distributed file system, enabling test replication and large-scale analysis.
- Achieved 50% agent performance improvement through performance analysis and code optimization.
- Improved code documentation, reduced hire onboarding time by around 33%.
- Managed two new hires using Agile methodologies, leading weekly scrum meetings, planning new features and project direction.

Computer Science Grader | *University of Portland*

Portland, OR | August 2022 - Dec 2023

Analysis of Algorithms & Intro to Computer Science

- Evaluated 15 algorithms assignments and 30 Java projects weekly.
- Provided code reviews, improvement suggestions and tutor help to enhance students' understanding in object-oriented programming principles, data structures and algorithms.

PROJECT EXPERIENCE

Project Finder

Present

- Developing a full-stack web application using React and Node.js, enabling users to showcase their projects online and facilitating collaboration.
- Migrated database infrastructure from AWS RDS PostgreSQL to Azure SQL.
- Facilitate project development using Jira, Figma, and Flowchart within the Kanban agile methodology.

Tektronix AR HoloLens | *University of Portland Capstone (Tektronix)*

Fall 2023

- Developed an augmented reality data visualization tool to display electromagnetic waves, using C# and Unity to render data.
- Predicted electromagnetic AM waveforms with Python TensorFlow, JAX and Keras (RNN, SVR, LSTM).
- Implemented MySQL databases (2,500,000+ data points) for data quality and model assessment.
- Applied agile methodology in weekly scrum meetings to adjust project direction according to client feedback with continuous integration and deployment.

Shogi | *Object Oriented Design*

Fall 2022

- Developed an Android mobile game using Android Studio Java, agile methodologies with Atlassian Trello, and test-driven development with JUnit.
- Delegated tasks for team and Implemented back-end development, encompassing piece movement, capture, deployment, promotion, and initialization functionalities.