Edward J Tan

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EDUCATION

- **University of Rochester**
  BS in Computer Science — *Sept. 2021 to May 2025*
  - **Relevant Coursework:** Artificial Intelligence, Computer Organization, Storage Systems, Cloud Infrastructure Data Structrues and Algorithms, Database System, Machine Learning, Web Programming

EXPERIENCE

- **Peking University** — *Beijing, China*
  Software Engineer Intern (Computer Vision Research) — *May 2024 to Aug. 2024*
  - Collaborated with a team of 3 to develop an open-source library for interactive 3D visualization in Python
  - Designed and implemented a web-based 3D rendering tool in Three.js to visualize Gaussian splat cloud, improved research efficiency by 40% by visualizing machine learning models results in web interface
  - Optimized a 3D visualization machine learning model, achieving 15% faster processing speed
  - Maintained a published application backend in Django, saving 10% of memory used for users

- **University of Rochester** — *Rochester, NY, USA*
  Front-end Developer — *Sept. 2023 to May 2024*
  - Designed a website for University of Rochester Ink and Wash painting club, improved click-through rate by 25%, and increased new club membership by 30%
  - Reconstructed the original website using React and Tailwind CSS, increased code readability and modifiability for future development
  - Deployed and maintained the website using Github pages, saving 90% of original planned cost in hosting

- **University of Rochester** — *Rochester, NY, USA*
  Teaching Assistant (CSC 172, Data Structures and Algorithms) — *Jan. 2023 to May 2024*
  - Led recitations and office hours supporting 100+ students in Java algorithm design and programming class

PROJECTS

- **LeetCode Stats Analyzer** — *Feb. 2024*
  - Developed a web application that fetches Leetcode api to track user's progress and statistics
  - Deployed on University of Rochester server, allowing students to compare their progress with peers

- **Light-weight AI Reversi Game** — *Dec. 2023*
  - Wrote a two-role reversi game with AI agent from scratch in Python in less than 500 lines of code
  - Implemented Minimax algorithm in a one-layer convolutional neural network to make the AI agent

- **Player Skill Prediction in League of Legends** — *June 2023*
  - Led a Python machine learning project that provides predictive analytics based on automated data scraping, achieved 80% accuracy in predicting player future skill level in League of Legends

TECHNOLOGIES

- **Languages:** Python, Java, JavaScript, C, Swift, SQL, R, HTML, CSS
- **Software & Tools:** Git, Vim, Visual Studio Code, Jupyter Notebook, LaTeX, Microsoft Office, Unix Commands
- **Domains:** Web Development, Ranking, Machine Learning, Computer Vision, Distributed Systems