

# NICOLAS EKSTRAND

(650) 946-8268 | <https://github.com/JaggedSpace> | [nicolas.ekstrand@gmail.com](mailto:nicolas.ekstrand@gmail.com) | Los Altos, CA

## EDUCATION

- Washington University in St. Louis** | St. Louis, MO **May 2028**  
B.S. in Computer Science and B.A. in Applied Mathematics, GPA: 3.99
- Coursework: Systems Software, Data Structures & Algorithms, Object Oriented Software, Linear Algebra, Computer Security
- Menlo School** | Menlo Park, CA **May 2024**  
*High School Diploma*
- Activities: Varsity Water Polo, Computer Science Teaching Assistant

## SKILLS

- *Programming Languages:* Python, Java, C++, JavaScript, SQL, R, Assembly
- *Libraries:* PyTorch, NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, SHAP, XGBoost
- *Web & Infrastructure:* JavaScript, REST APIs, React, Node.js, HTML/CSS, Vercel, Cloudflare
- *Development Tools:* Git/GitHub, VSCode, Figma, Wireshark, Unity, Unreal Engine 5, Jupyter

## WORK EXPERIENCE

- Palo Alto Ventures** | Palo Alto, CA **May 2025 – July 2025**  
*Financial Analyst Intern*
- Conducted due diligence on technology companies by developing financial models using Excel
  - Improved software development skills and project approach with Cursor: created one application a week
  - Analyzed company backgrounds and political events to present three ETFs to invest in per week
- Menlo School** | Menlo Park, CA **August 2023 – February 2024**  
*Computer Science Teaching Assistant*
- Hosted 2 hours of office hours each week for assignment guidance
  - Taught students applicable Java syntax and efficient logic for class projects
- StreetCode Academy** | Menlo Park, CA **May 2023 – July 2023**  
*Game Development Teaching Assistant*
- Guided students through basics of block properties, level design, and distributed systems in RobloxStudio
  - Solved 5 students' technical difficulties with account linking and user interface per studio session
- Looma Education** | Menlo Park, CA **May 2023 – July 2023**  
*Frontend Engineer*
- Enhanced front-end web technologies via CSS flexibility to better suit Android phones used in Nepal
  - Improved online access to educational materials for remote Nepalese students

## PROJECTS

- LaTeX Auto Typer**
- Trained a character-level LSTM model in PyTorch on a custom corpus of .tex files to generate syntactically valid LaTeX math expressions and prose
- Kaggle Loan Default Predictor Audit**
- Audited a Kaggle competition model for algorithmic fairness using demographic parity, equalized odds, and SHAP value analysis, flagging age and tenure as sensitive variable proxies
- Oncology EPIC Report Summarizer** | <https://epic-report-filter.vercel.app/>
- Built a rule-based Python tool that parses EPIC oncology reports into labeled sections, enabling clinicians to selectively remove content and export a compressed PDF
- Spotify Recommendation Model**
- Built a recommendation system in Python containing over 400,000 Spotify tracks using audio attribute matching across 4+ simultaneous similarity dimensions via REST API
- Euclid – Retail Widget Recommendation Engine**
- Refactored a 2,000-line monolithic JavaScript codebase into a modular ES6 architecture to support a retail product recommendation widget engine
- WashUX Website** | <https://washux.com/>
- Designed and deployed the WashUX club's primary portfolio and outreach website in HTML, CSS, and JavaScript on Vercel
- Spotify Playlist Creator**
- Built a dedicated Spotify playlist creation interface in Python with integrated real-time recommendations via REST API

## EXTRACURRICULARS

- **WashUX Club Vice President:** Tracked financials for events and set up amenities for career expos, deployed club website
- **WashU Club Water Polo Team Captain:** Competed in 3 D1 tournaments with 20 teammates, coordinated practice drills