Heena Khan

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EDUCATION

Stanford University **Expected Graduation:** December 2026(B.S)/December 2027(M.S)
B.S. Computer Science (Artificial Intelligence Track) | Minor: Biology | M.S. Computer Science
Relevant Coursework: Programming Abstractions, Data Structures & Algorithms Discrete Mathematics, Probability and Statistics, Artificial Intelligence, Operating Systems, Computer Systems, Human-Computer Interaction Design

EXPERIENCE

Software Engineering Intern — Data Platform
Neurotrack Technologies Palo Alto, CA | June 2025 – August 2025

- Built production Python/R data pipelines processing 10,000+ cognitive assessment records for Alzheimer's detection ML platform
- Designed SQL-based ETL workflows improving data quality and model performance for clinical AI evaluation
- Automated data validation reducing manual processing time 60%, enabling faster iteration on neurocognitive models

Bioinformatics Research Intern
Petritsch Lab, Stanford University Stanford, CA | June 2023 - September 2024

- Developed R-based RNA-seq analysis pipeline identifying molecular signatures distinguishing glioma subtypes
- Built automation scripts for genomic data processing (FASTQ → differential expression), improving lab reproducibility
- Applied statistical methods to high-dimensional biological datasets, extracting clinically actionable insights for cancer research

Design Fellow
Pull for Progress Palo Alto, CA | 2024 - Present

- Engineered geospatial healthcare tool using Python, Pandas, Folium with interactive visualizations for resource allocation
- Built web applications with JavaScript and D3.js supporting Stanford Global Health Center field deployments

Stanford Tech Fellow
Afghanistan Women's Council New York, Ny | 2023-2024

- Engineered responsive React e-commerce site optimized for low-bandwidth with WCAG 2.1 AA accessibility
- Built product catalog, cart, and checkout with efficient client-side state management

PROJECTS

AMANI – AI-Enabled Health Mapping System | Stanford Healthcare Design Challenge Finalist
React Native, TensorFlow Lite, PostgreSQL, REST APIs, Computer Vision

- Architected offline-first mobile system for geotagged hazard reporting in refugee camps using React Native
- Designed edge AI pipeline with on-device TensorFlow Lite for hazard classification, optimized for low-connectivity environments
- Implemented privacy-preserving sync architecture with PostgreSQL backend and human-in-loop verification workflows

ModestFilter AI – Chrome Extension
JavaScript, Chrome APIs, Web Workers, Computer Vision, ML

- Developed Manifest V3 extension with on-device computer vision for real-time image classification
- Optimized performance using Web Workers achieving 3–5× speed improvement over baseline implementation

SKILLS

Programming Languages: Python, C++, Java, R, SQL, HTML/CSS, JavaScript, Node.js
Frameworks & Libraries: React, Pandas, Folium, OpenCV
Tools & Platforms: Git, Figma, HuggingFace, Chrome APIs