


POOYA KHOSRAVI

 khosravipooya.com  khosravipooya

RESEARCH PROJECTS

AI/ML to Improve Glaucoma Management

[python](#), [pytorch](#)


 Jun 2020 – Present

 UC San Diego Hamilton Glaucoma Center

- Developed supervised machine learning approach to use longitudinal OCT and OCT-Angiography (OCTA) measurements to predict visual field progression in glaucoma suspect and glaucoma patients.
- Developed deep learning models to predict the severity and pointwise patterns of glaucomatous visual field damage on 24-2 and 10-2 test strategies using optic nerve head and macular OCTA images.
- Characterized the spatial patterns of microvascular dropout in glaucoma using unsupervised artificial intelligence approaches.

AI/ML in Medicine

[python](#), [pytorch](#), [tensorflow.js](#)

 Jun 2021 – Present


 UC Irvine


- Worked on AI/ML projects in various medical specialties. For example, developed a deep learning model and website for distinguishing tympanic membrane pathologies based on otoscopic images.

PROFESSIONAL EXPERIENCES

Software Engineer

[InfiniGlobe](#)

 Sep 2019 – Mar 2021


 Jun 2017 – Apr 2019


 Newport Beach, CA

- Built machine learning services and pipelines for data ingestion and model training. Implemented deployment services for trained models to predict costs of legal matters and suggesting actionable recommendations.
- Built legal matter recommendation and analytic services by extracting key performance indicators (KPIs) to improve risk management of legal vendors.

Software Engineer Intern

[Boeing](#)


 Jun 2019 – Sep 2019

 El Segundo, CA

- Designed a system to create data validation SQL queries using configurable mappings with python to streamline data verification at different manufacturing stages of a satellite.

Student Researcher

[UC Irvine Medical Center](#)

 Jun 2018 – Jun 2019


 Orange, CA

- Worked on various clinical projects and took a lead in developing a crossplatform smartphone application to investigate the efficacy of combined cognitive behavioral therapy and sound therapy for tinnitus patients.

EDUCATION


University of California, Irvine
School of Medicine

MD/PhD Candidate

 Aug 2021 – Jun 2029


University of California, Irvine

PhD in Computer Science

 Sep 2022 – Jun 2026


University of California, Irvine

**BS in Computer Science and
BS in Biomedical Engineering**

 Sep 2017 – Jun 2020

GPA : 3.99

Irvine Valley College

 Jun 2015 – May 2017

GPA: 4.0

TEACHING

- Anatomy Tutor 2022 - 2024
- International Collegiate Programming Contest (ICPC) Coach 2018 - 2023

ACHIEVEMENTS

- The 2023 ICPC North America Championship Bronze Medal, Sixth place Team: UCI Map (Co-Coach) 2023
- SIR MSC Bidesign & Innovation Competition Semi-finalist 2022
- Ranked 99th worldwide, 7th in US for IEEEExtreme 13.0 2019

INVOLVEMENTS

- Associated Medical Student Government (AMSG) - Treasurer 2021 - 2024

SKILLS

Advanced:

Python

Java

C/C++

LaTeX

SQL

Intermediate:

JavaScript

PHP

Matlab

C#

Familiar:

Unix/Linux

Bash

Powershell