

Rohin Shanker

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Work Experience

LayerJot

Belmont, CA | Palo Alto, CA

MACHINE LEARNING INTERN

May 2023 – Aug 2023

- Trained and optimized Detectron2 and YOLOv8 ML models for segmenting images of medical and surgical instruments
- Onboarded and led team of three interns to handle data wrangling, harvesting, and model testing for OR and sterile processing
- Cleaned, schema migrated, and manipulated TBs of medical imaging data and implemented live video tracking software for ORs

DATA SCIENCE INTERN

Jun 2021 - Aug 2022

- Developed Rapid Instrument Capture workflow to catalog surgical instruments and automatically update data lakes 5x faster
- Refined and tested computer vision algorithms for classifying surgical tools, assembling tool trays, and verifying O.R. count sheets
- Integrated ML platform with high-resolution camera software and identified visual features for new potential uses of CV platform

Inspectrum

Belmont, CA

COMPUTER VISION RESEARCHER

May 2023 – Aug 2023

- Classified common endoscope lumen issues and defects into catalog for borescope technicians in the data labeling team
- Created visual inspection platform and scale for image segmentation team to evaluate issues using imaging hardware tools
- Performed competitive analysis of existing medical imaging platforms in the field to inform company roadmap and product

The Daily Californian

Berkeley, CA

SOFTWARE AND WEB DEVELOPER

Jan 2023 - May 2023

- Develop and add new features to the current Daily Californian news website (1,000,000+ monthly visitors) in JavaScript and Next.js
- Work on projects with a team of developers while liaising with Editorial and serving on the Business Board to increase ad revenue
- Maintain all Daily Californian tech by troubleshooting phone, computer, and server issues and automatically deploying updates

Stanford A3 Program (Stanford Global Health)

Stanford, CA

PROJECT ASSISTANT

Feb 2021 - Aug 2022

- Implemented A3 framework for early detection + awareness + curing of cervical cancer working with Stanford EQuIP and faculty
- Launched outreach platforms and media campaigns targeting women in low-income communities throughout South Asia
- Developed and user tested targeted messaging to help women overcome social stigma associated with cervical cancer

SonoVol (Acquired by PerkinElmer)

Durham, NC

RADIOLOGY INTERN

Jun 2021 - Jan 2022

- Segmented rat livers from non-invasive, high throughput 3D ultrasound imaging to build data platform that can accelerate drug development and clinical trials for humans, as the FDA approval process is highly time and resource-intensive
- Developed web data extraction tools to parse relevant medical publications and accelerate outreach to experts in relevant fields

Abdominal Cancer Day

Jaipur, India

CAMPAIGN COORDINATOR

Jun 2021 - Jan 2022

- Worked with Abdominal Cancer Day Team in Jaipur, India, to use Stanford's A3 framework to create awareness about abdominal cancer, as patients in India typically see a doctor or are diagnosed only by the time they reach stages III and IV
- Developing a simple web-based prognosis tool for basic phones in multiple local dialects targeting the rural populations

Candid

Palo Alto, CA

LEAD PRODUCT DEVELOPER, CO-FOUNDER

Jun 2020 - Aug 2022

- Built algorithm based diagnostic assessment, designed content and web platform to make local policy process more transparent
- Deployed first iteration during 2020 elections in LA County and expanded to target urban city council races in next election cycle
- Awarded semifinalist in an international social impact design challenge, recognizing initiatives addressing pressing global issues

Education

University of California, Berkeley

Berkeley, CA

COLLEGE OF ENGINEERING

Aug 2022 - May 2026

- B.S. Bioengineering | Sophomore | Technical GPA: **3.85**
- Coursework — Interface between Neuroethology & Neural Engineering (BIOENG 171), Introduction to Biomedicine for Engineers (BIOENG 10), Data Structures (CS 61B), Structure and Interpretation of Computer Programs (CS 61A), Professional Biotechnology (BIOENG 25), Probability & Statistics (STAT 20), Principles of Business (UGBA 10), Visual Communication & Sketching (DESINV 21)

Skills and Interests

Lab Skills:

RFLP, rDNA Transformation, Borescopy, Microscopy, Micropipetting, Dissection, Sterile Technique

Programming Languages:

Python, Java, HTML/CSS, JavaScript, R, SQL, Next.js, Lisp (Scheme)

Additional Skills:

Built and Maintained Cooking Blog, StreetCode Coding Mentor, Bilingual in English and Spanish