## **Sumit Mantri**

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## Education

University of California, Davis - Computer Science and Statistics (Machine Learning Track)

#### WORK EXPERIENCE & ACTIVITIES

# UC Davis Research - Dr. Tagkopoulos Lab

May 2025 -

• Understood the **D3PM model** implementation and fine tuning of the model in creating synthetic sequences that can be tested in real world

## **Artificial Intelligence Student Collective** - SWE in Objected Detection

October 2024 -

- Web-Scraping to gather data for our test set via Selenium and chrome Web Driver
- Used **You Only Look Once (YOLO) model** through TensorFlow framework to provide live haptic feedback to the user

## **PROJECTS**

## **Image Segmentation**

June 2024 - July 2024

- Built a **U-Net convolutional neural network** in TensorFlow/Keras for **semantic image segmentation** on a self-driving car dataset.
- Achieved 90% accuracy by designing and testing modular U-Net blocks (convolution, pooling, upsampling) to ensure correct architecture using model summaries

#### **CERTIFICATIONS**

# **TECHNICAL SKILLS**

Languages: Python 3, C++, Java, R, MATLAB, HTML, CSS, Node.JS, Javascript, MongoDB