J/A

JOSH ARNOLD

Student | Developer

CONTACT

📞 : 8082567179

✉ : jarnold@ucdavis.edu

🌐 : https://josharnoldjosh.github.io

EXPERIENCE

A.I. RESEARCH ASSISTANT

Professor Zhou Yu's Lab, UC Davis / November 2017 - Present

Developed a multimodal chatbot that learned a joint representation of vision and text.

Trained the agent using hierarchical reinforcement learning and evaluated its

performance on a 20 image guessing game.

HACKDAVIS DIRECTOR

UC Davis / January 2018 - Present

Organized the annual hackathon at UC Davis with 700+ attendees. Developed an

application to streamline 1500+ hacker applications. Lead workshops for the student

body on industry tools and software development.

PORTFOLIO

NOVOGEN.AI

TreeHacks, Stanford University / February 2018

Built an A.I. model that can generate novel medicines. Trained an auto encoder to

reconstruct chemical compounds represented as strings. Wrote an algorithm to randomly

interpolate the latent space to generate novel compounds that were externally verified.

Won best data science award.

MASS SPECTRA SIMULATION

Professor Oliver Fiehn's Lab / September 2017 - Present

Developed a deep learning model to accurately simulate mass spectra directly from

compound structures. Currently submitting work for publication.

LENS

Microsoft Imagine Cup / March 2017

Trained and deployed a convolutional neural network to a mobile app that can predict

whether or not a skin lesion is benign or malignant. Qualified to the national finals.

EDUCATION

BS - COMPUTER SCIENCE & ENGINEERING

University of California, Davis / September 2017 - June 2021

Deans honor list recipient four times in a row. Boeing Scholar Recipient.

SUMMER SESSION

Stanford University / Summer 2018

STATS 101 & STATS 216