

# Shayan Sadigh

<https://shayanpersonal.github.io> | [ssadigh@ucsb.edu](mailto:ssadigh@ucsb.edu)  
Deep Learning | AI | Security

## EDUCATION

### UC SANTA BARBARA

#### MS IN COMPUTER SCIENCE

June 2018 | Santa Barbara, CA

Cum. GPA: 3.8 / 4.0

#### BS IN COMPUTER SCIENCE

June 2017 | Santa Barbara, CA

College of Engineering

Dean's Honors (7x)

Upper GPA: 3.9 / 4.0

## LINKS

Github:// [shayanpersonal](#)

LinkedIn:// [shayan-sadigh](#)

## COURSEWORK

### GRADUATE

Deep Learning

Parallel Programming

Information Theory

Scalable Web Applications

Computational Geometry

Cryptography

Knowledge Bases

Mobile Computing

### UNDERGRADUATE

Artificial Intelligence

Computer Networks

Computer Vision

Data Structures and Algorithms

Databases

Distributed Systems

Operating Systems

Security

Theory of Computation + others

### ONLINE

UCL's Reinforcement Learning

Stanford's CNNs for Vision

EPFL's Neuronal Dynamics

## SKILLS

### PROGRAMMING

Over 10,000 lines:

Python • C

Over 1,000 lines:

C++ • JavaScript

Familiar:

Java • Android • SQL • x86 • C#

Ruby • MATLAB • CUDA • HTML

## RESEARCH

### UCSB MIRAGE LAB | GRADUATE DEEP LEARNING RESEARCHER

Jan 2018 – Present | Santa Barbara, CA

arXiv:1805.10766 Proposed, developed, and researched Multisampling and Checkered Subsampling, a class of new techniques for improving the spatial capacity of feature maps in neural networks. Significantly improves performance of all CNNs in image classification. Submitted to NIPS 2018 under the advice of Pradeep Sen.

### KAGGLE | TOP 10 IN \$1.5 MILLION COMPETITION

Sep 2017 – Dec 2017

Developed LSTM / CNN / Attention model for threat detection on 3D millimeter wavescans for \$1.5 Million Passenger Screening Algorithm Challenge sponsored by the Department of Homeland Security. Won 10th place and gold medal, presented findings to UCSB Four Eyes Lab. Of top 10 winners, wrote the most efficient solution.

## EXPERIENCE

### UC SANTA BARBARA | TEACHING ASSISTANT

March 2018 – June 2018 | Santa Barbara, CA

Graduate teaching assistant for CS176A: Intro to Computer Networks.

### PALO ALTO NETWORKS | SOFTWARE ENGINEERING INTERN

June 2017 – Sep 2017 | Santa Clara, CA

Developed software in Python and C to process PCAPNG packet captures for PAN Next-Generation Firewalls.

### THERMO FISHER SCIENTIFIC | SOFTWARE ENGINEERING INTERN

Nov 2016 – Jan 2017 | Santa Barbara, CA

Developed new installers in C# for Hyperion Scanning Probe Microscopes.

### UCSB BRAIN INITIATIVE | LEAD WEB DEVELOPER

Sep 2015 – June 2016 | Santa Barbara, CA

Planned, developed, and maintained website for new UCSB research department.

## ACTIVITIES

- 2016 - Present Various deep learning projects, uploaded to Github.
- 2015 - Present Leader of Dance Dance Revolution club at UCSB.
- 2018 Deep learning for NLP paper reading group.
- 2018 Network science paper reading group.
- 2017 Member of UCSB Hacking Club.
- 2016 Developed and published GauchoMap (300+ users).
- 2016 Discovered and reported major web exploits on Piazza.com.

## AWARDS

- 2018 Top 10 / 518 teams + gold medalist in \$1.5 million Passenger Screening Challenge
- 2017 Glenn Culler Scholarship Recipient
- 2017 Top 858 / 25289 in Google Code Jam, Qualification Round

## OTHER

2nd-degree black belt (8+ years experience) in Korean martial art Soo Bahk Do.  
Youtube channels with 4,000+ subscribers and over 1 million video views.  
Highly experienced pianist (15+ years) with four public performances.  
Plays Dance Dance Revolution at a professional level.