

## Education

---

BS Computer Science: University of California, Santa Cruz (graduating spring 2020)

GPA: 3.9, Dean's Honors

## Skills

---

Course Work: Machine Learning (graduate class), Artificial Intelligence, Operating Systems, Computer Security, Algorithms

Proficient in **C++**, **Python**, C, Haskell, Prolog, Scala, Java

Toolkits: Opencv, Tensorflow, Matlab, Scikit-learn, Pandas

github: [https://github.com/Agupta00/projects\\_](https://github.com/Agupta00/projects_)

## Work History

---

### AI Researcher

2019 - Current

UCSC - Narges Norouzi's Lab

Researcher at Professor Norouzi's lab. Working on developing a hierarchical/compositional model based on current findings of cognitive neuroscience, analogous to the brain circuits of the visual cortex. Key goals revolve around generalization across various domains and **invariant/one-shot learning**. I used python and openCV to implement the model.

Code and abstract: <https://github.com/Agupta00/invariant>

### Intern

Summer 2017

UCSB - Natural Language Processing Lab

I worked in Professor William Wang's lab to visualize different parts of knowledge graphs (representations of an entity and its relationship to other entities).

Additionally, I partook on research regarding entity linking (an important task in building knowledge bases in NLP). I studied novel approaches to the problem and implemented and improved on these current models for entity linking tasks.

### Developer

2015 - 2016

Human Project

I conceived the idea for a better home security system due to a lack of current solutions on the market based on my first hand experience of being robbed.

Current security systems on market are not intelligent. I developed a prototype for a smart security system in the form of an intelligent camera, utilizing the latest algorithms and open source code. I utilized **OpenCV** and **Animetrics** libraries to guard the house and detect anomalies attributed towards break ins.

\*[selflearningcamera.blogspot.com](http://selflearningcamera.blogspot.com)

### Intern

Summer 2016

Nanosec

Nanosec is a stealth mode startup which is currently developing a cutting edge algorithm for securing applications in the cloud. I worked with the CEO of the company to design the web pages and content for the website.

\*<http://nanosec.io>