Arnav Garg

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EDUCATION University of California - Los Angeles

Masters in Computer Science

• **Teaching Assistant** := PIC10A - Introduction to Programming

• Cumulative GPA: 4.00 / 4.00

University of Texas - Arlington

Bachelors in Computer Science

Graduated with College Honors.

• Cumulative GPA: 3.98 / 4.00

Selected Coursework (Graduate and Undergraduate)

Quantum Programming Neural Networks & Deep Learning Artificial Intelligence
Linear Algebra Machine Learning Algorithms Intro to Machine Learning

Foundations in Deep Learning Automated Reasoning

WORK Microsoft
EXPERIENCE Software Engineering Intern (Incoming), AI Platform

Joining the Exp-Platform and AI Team. Internship starts Summer 2019

Nod Labs Mountain View, CA

Software Engineering Intern, Computer Vision

• Camera Sync Interrupts: Created low level camera sync packets to sync the Nod's HMC camera and Optitracks camera and transferred the packets over to server via in-house serial protocols.

· Latency Check: Wrote scripts to find the latency in the Nod's propriety object tracking algorithm.

RESEARCH EXPERIENCE

Heracleia Lab, University of Texas - Arlington

Aug 2015 – Aug 2017

Sep 2018 - Apr 2020

Aug 2014 - May 2018

Bellevue, WA

Jun 2019 – Sep 2019

May 2017 – Aug 2017

Worked on algorithms for diagnosis and handling of dementia-related diseases in the elderly, as well as increasing
efficiency in memorizing system assigned passwords.

PUBLICATIONS

- [1] Arnav Garg. 2018. Glovelet: Wearable Virtual Object Tracking Glove. Undergraduate Honors Thesis at the Honors College. University of Texas Arlington, Arlington, TX, USA
- [2] Theodora Toutountzi, Cheryl Abellanoza, Arnav Garg, Dylan Ebert, and Fillia Makedon. 2017. Rewind/Remind: A cognitive tool for people with associative memory deficits. In Proceedings of the 10th International Conference on PErvasive Technologies Related to Assistive Environments (PETRA '17). ACM, New York, NY, USA, 390-393. DOI: https://doi.org/10.1145/3056540.3076178

PROJECTS

GloveLet

Python, Flex Sensors, OpenCV, Arduino

Glovelet is wearable tracking glove that can replace the traditional mouse to a more user-interactive and easy to use
device. This would greatly enhance the user experience and would allow users to use their hands to move objects, both
two-dimensional and three dimensional, on the computer screen thereby making the experience more intuitive for younger
and older adults.

SecurePass

NodeJs, AngularJs, ExpressJs, MongoDB

• A web-based game that helps the user memorize system assigned passwords easily.

Unmanned ROVER

Python, Arduino

• Developed a Python Code using Pygame to control the movement of the R.O.V.E.R (Remotely Operated Vehicle for Exploration and Reconnaissance) via a Joystick Controller.

LANGUAGES

Python, C/C++, Matlab, Shell, Javascript, Java, MySQL, MongoDB.

FRAMEWORKS 8 LIBRARIES

FRAMEWORKS & NumPy, Matplotlib, Scikit-learn, Flask, NodeJs, ExpressJs, PyGame