

VIBHU KUNDETI

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EDUCATION

University of Pittsburgh

August 2019 - April 2022

BS Computer Science *GPA: 3.761*

- Concentration in Machine Learning and Mathematics

Thomas Jefferson High school of Science and Technology

September 2015 - June 2019

Coursework: Algorithm Implementation, Data Structures, Formal Methods In Computer Science, Artificial Intelligence, Parallel Computing, Linear Algebra, Probability Statistics, Discrete Structures

Achievements: Pitt Success Grant Recipient, Panther Pride Award, Grid Creator Hack at HackTJ

EXPERIENCE

UPITT School of Computing and Information Research Lab

Pittsburgh, PA

Researcher

January 2021 - Present

- Using machine learning implementations to analyze both motion and appearance in video data sets in order to build predictive models.

Zolon Tech Inc

Herndon, VA

Intern

May 2019 - August 2019

- Worked with systems administrator and gained experience with Windows Server 2016 and deployed Active Directory with an emphasis on sustaining scalability. Grew user base from a set of 3 test users to 50 active users.
- Maintained a mixed server environment (Windows/Linux) along with managing a database for administrator/user permissions and password authentication.

TJHSST Computer Systems Research Lab

Alexandria, VA

Researcher

August 2018 - May 2019

- Implemented a python based SIFT algorithm for image matching to determine the location of a subset of an image relative to the whole image
- Used OpenCV library to apply Gaussian blur to create threshold image, and determined locations of pieces within image. Processed pieces using CV techniques, including Harris Corner Detection and Hough Line Transform.
- Wrote a python based instruction set that used uArm's API to translate output of solving algorithms to an instruction for a robotic arm (uArm Pro).
- Full paper linked here: [Paper Link](#).

LEADERSHIP

National Air and Space Museum - Steven F. Udvar Hazy Center

Chantilly, VA

Volunteer, Organizer

June 2018 - August 2019

- Organized the geology exhibit, where I would present the exhibit to 100-300 visitors daily and also manage artifacts/objects for the exhibit.
- Co-coordinator for student volunteers during monthly events, such as the solar eclipse and military flyover, to assist 1,500+ visitors. Assigned roles for volunteers throughout these events, as certain exhibitions were understaffed or overstaffed.

SKILLS/INTERESTS

Highly Skilled:	Java, Python, Git
Proficient:	HTML, CSS, Swift, C, JavaScript, MIPS, SQL
Libraries/Tools:	OpenCV, jQuery, Ajax, Core Data, Microsoft Suite
Interests:	Basketball, Cooking, Traveling, Movies, Board Games

PROJECTS

CashIn Languages: Python, HTML, CSS

October 2017

- Built a web app allowing for user's to capture an image of a receipt and distribute items on receipt to other users on platform.
- Trained OCR on a set of 1000 images of receipts to detect patterns with locating corresponding item names and prices.

IOS Drawing App Languages: Swift

July-August 2020

- Built iOS app that allows users to use web images and emojis to draw pictures and take notes. Files are stored in either user preferences or stored in user's iCloud, so files can be accessed from different devices.
- Used Core Data to implement a database in order to store different "themes" for drawing.