Vibhu Kundeti

vkundetis@gmail.com \cdot 703-638-9545 · vkundetis.github.io · Pittsburgh, PA · US Citizen

EDUCATION

University of Pittsburgh

August 2019 - December 2022

BS Computer Science GPA: 3.792

• Concentration in Computer Systems and Machine Learning

Thomas Jefferson High School of Science and Technology

September 2015 - June 2019

Coursework: Algorithm Implementation, Data Structures, Formal Methods In Computer Science, Machine Learning, Linear Algebra, Probability Statistics, Discrete Structures

Achievements: Pitt Success Grant Recipient, Panther Pride Award, Dean's List, Grid Creator Hack

EXPERIENCE

MicroStrategy

Tysons, VA

Software Engineer Intern

May 2021 - August 2021

- \bullet Improved developer website by adding Postman integration
- Implemented existing client/developer workflows within Postman using MicroStrategy REST API in addition to designing and creating new workflows based on user need for latest API version.

UPITT School of Computing and Information Research Lab

Pittsburgh, PA

Researcher

January 2021 - May 2021

- Aimed to use hallucinated optical flow (predicted motion) to improve nuanced interpretation of advertisements
- Generated pixel level representations of predicted flow for Pitt's Image Ad dataset using a ConvNet
- Visualized these pixel level representations as flow vectors drawn on the original image for analysis

TJHSST Computer Systems Research Lab

Alexandria, VA

Researcher

August 2018 - May 2019

- Aimed to solve a jigsaw puzzle using a robotic arm and overhead camera
- Used OpenCV library to process an image of a scattered puzzle by generating contours, corner detection, adjusting for lens distortion, etc.
- Implemented a python based SIFT algorithm for image matching to determine location of a given piece
- Created an instruction set to translate digital solution of puzzle to instructions for the robotic arm (uArm Pro)
- Full paper linked here: Link

LEADERSHIP

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

Chantilly, VA

Volunteer

June 2018 - August 2019

- Lead the Geology exhibit, where I would present the exhibit to 50-300 visitors daily Responsible for training new volunteers working the exhibit and managing artifacts/interactive sections.
- Organized student volunteers during large monthly events (solar eclipse, military flyover) by managing exhibitions as they became understaffed or overstaffed

SKILLS/INTERESTS

Highly Skilled: Java, Python

Proficient: C, JavaScript, Swift, HTML, CSS MIPS, SQL Libraries/Tools: OpenCV, jQuery, Ajax, Core Data, Git, REST API

Interests: Chess, Painting, Traveling, Board Games

Projects

House Hack Languages: Python, React, Node.js, Angular.js, Solidity

March 2018

- Allows direct and secure sale of properties between individuals, without the need of a third party; used Solidity in order to write smart contracts, which are stored on a blockchain.
- Utilized Dwolla API to implement safe and secure transactions of USD between buyer and seller
- Built GUI components with Angular.js, in which users can navigate/pull info from the blockchain and buy/sell houses.

CashIn Languages: Python, HTML, CSS

October 2017

- Web app allowing for user's to capture an image of a receipt of any purchase and distribute items to other friends on our platform.
- Trained OCR on a set of roughly 2000 receipts pulled from Google Images to detect patterns with identifying corresponding item names and prices.