Prannav Gupta

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Education

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN **2018 – 2022**

Bachelor of Science in Computer Engineering GPA: 3.70/4.0

College of Engineering James Scholar (Honors) Dean's List Spring' 19, Spring' 20

Related Coursework: Artificial Intelligence* (CS 440), Distributed Systems* (CS 425), Algorithms* (CS 374), Computer Systems and Engineering (ECE 391), Applied Parallel Programming (ECE 408), Data Structures and Algorithms (CS 225), Introduction to Computer Systems and Programming (ECE 220, Course Assistant SP,FA '20)

* = Fall 2020 (Expected)

Work Experience

NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS **JUNE 2020 – PRESENT**

SPIN INTERN URBANA, IL

- Working on the Development of AI-based Tools for Visual Analytics under Dr. Volodymyr Kindratenko
- Implementing a DNN on the edge using Intel OpenVINO to maximize performance using a VPU

HEALTHCARE ENGINEERING SYSTEMS CENTER (CSL) / AIRV LABS **JUNE 2019 – JAN 2020**

SOFTWARE ENGINEERING INTERN CHAMPAIGN-URBANA, IL

- Created the core of the Authoring Tool using Unity C# to help instructors create cross-platform (Oculus and SteamVR) Virtual Reality learning environments
- Created a Django REST API to seamlessly roam user profiles across the cloud and the various frontends (VR)
- Used ORM's and serializers to achieve end-to-end object-oriented design

ILLINOIS STATE WATER SURVEY **AUG 2018 – FEB 2019**

UNDERGRADUATE RESEARCH ASSISTANT CHAMPAIGN, IL

- Built an image processor for the ISWS Lake snow effect identifier tool to detect a region-of-interest using Python and OpenCV
- Processed large quantities of LIDAR data using Python and used open-source libraries such as matplotlib to interpret the data
- Conducted field experiments for the NSF funded SAVANT project to analyze the effect of stable boundary layers on crop productivity

Relevant Projects

PICBOT **JANUARY 2020 – MAY 2020**

Collaborated with a team to create a Deep Neural Network from scratch to recognize hand drawn Pictionary images using CUDA C++. Utilized various techniques like streams and shared memory to improve performance on GPU

ILLC3 **FEBRUARY 2019**

Co-Created an extension to add support for the LC3 assembly language for Visual Studio Code

Top 10 at HackIllinois 2019 and has 350+ installs from the Visual Studio Code marketplace

MOCK STOCK TRADING PLATFORM **JUL 2018**

Implemented user authentication and used a real-time API to fetch real-time stock data

Implemented the ability for a user to change passwords, look up current stock prices and see the net value of their portfolio. Personal Project created in the summer of 2018

Skills: C/C++, Python, **x**86, CUDA, C#, HTML/Javascript, Raspberry Pi, MATLAB, AWS, Unity, Operating Systems