# VIR NARULA

2441 Woodbridge Ln, Highland Park, IL, 60035 • +1 815-608-1508 • vnarula2@illinois.edu

https://github.com/virnarula • https://virnarula.com • https://www.linkedin.com/in/vir-narula-b2300a193/

### **Education**

#### University of Illinois at Urbana-Champaign

**Bachelor of Science in Computer Science** 

Minor in Business

GPA: 3.70

Expected Graduation: May 2023

## **Work Experience**

### University of Illinois at Urbana-Champaign - Undergraduate Research Programmer

May 2020 – Present

- Worked as part of LLVM research group developing HPVM, a heterogenous and parallel compiler infrastructure
- Implemented error reporting modules to be more informative, contextual, and extensible for programmers
- Created compiler front-end to convert traditional C/C++ code into domain-specific HPVM-C

#### Minimize Tremors – Microcontroller Developer

April 2020 - Present

- Programmed microcontroller for startup developing wearable tremor-dampening device for Parkinson's patients
- Created functional prototypes to collect and process data, and cause systems adjustments for various tremors
- Simulated Parkinson's tremors on a mechanical hand using Python libraries

### **Projects**

## Speechful - Desktop Application Developer

August 2020 - Present

- Developed speech-based document editing solution for those who have trouble using keyboards
- Used React.js, Electron, Javascript, and Google Speech to create desktop application
- Awarded Runner-up Best Pitch at HackThis 2020 as lead developer in team of 3

## ACM Pixel – Front-end Developer

August 2019 – December 2019

- Created a web front-end for a project to help familiarize new programmers with command line
- Used HTML, CSS, JavaScript, Python, Docker, and Bootstrap

## **Deep Learning Games**

May 2020 - Present

- Created deep learning models to play popular games such as Blackjack, Flappy Bird, and Snake
- Used Keras + TensorFlow for learning and PyGame for mechanics.

#### **School Involvement**

## SIGMobile (Special Interest Group for Mobile Development) – Member

August 2020 – Present

• Developed various Android Applications in teams such as online games, and personalized stocks apps

# **Project Code** – Member

January 2020 - Present

• Developing a new Engineering student portal to connect students with groups and events in team of 8

#### Awards, Honors, and Important Roles

Runner-up Best Pitch at HackThis, HackIllinois, - Awarded prize for second-best overall product pitch

Excellence in Computer Science Award- Awarded to the top computer science student of the year

Computer Honor Society (President) - Organized events to promote interest in Computer Science

School Class Council (President) - Organized major school events such as Prom and Graduation

August 2015 – May 2019

## **SKILLS & INTERESTS**

Languages: English (Native), Hindi (Fluent), French (Conversational)

**Programming Languages:** *Proficient:* C/C++, Java, Python. *Intermediate*: HTML, CSS, JavaScript, SQL, Haskell **Tools and Technologies:** LLVM, Keras, Tensorflow, Microcontrollers, Bootstrap, React.js, WebSockets **Interests:** Compilers, Programming languages, Deep-Learning, Embedded systems, Web Dev, Mobile Dev