Vinodh Nagarajan

vinodhn2@illinois.edu | (925) 594-9411 | linkedin.com/in/vinodhnagarajan | github.com/vinodhn

EDUCATION

University of Illinois at Urbana-Champaign | Champaign, IL — Expected: December 2022

Bachelor of Science in **Mathematics and Computer Science** — Cumulative GPA: 3.70/4.00

Relevant Coursework: Data Structures, Software Design Studio, Computer Architecture, Statistics and Probability I, Applied Linear Algebra, Fundamental Mathematics

Arizona State University | Tempe, AZ — Attended: August 2019 – May 2020

Bachelor of Science in **Computer Science** — Cumulative GPA: 3.75/4.00

Relevant Coursework: Objected-Oriented Programming and Data Structures, Digital Design Fundamentals, Calculus with Analytical Geometry III, Discrete Mathematical Structures

Awards: Dean's List Fall 2019 – Spring 2020

SKILLS AND TECHNOLOGIES

Programming Languages: Java, Python, C++, Kotlin, C, Verilog, R, JavaScript, HTML, CSS

Tools, Environments: GitHub, Android Studio, IntelliJ IDEA, Visual Studio Code, RStudio, Arduino

RELEVANT EXPERIENCE

CS 126 Course Assistant, University of Illinois | Champaign, IL — January 2021 – Present

- Moderating weekly code reviews and providing feedback and grading students on code readability and structure
- Mentoring students on best coding practices, including code style, object decomposition, good object-oriented program design and version control through GitHub

Software Engineer, Illini EV Concept | Champaign, IL — February 2021 – Present

- Using OpenCV, Python to develop a parking assistant system that combines camera feeds to give the driver a bird's eye view of the car and display parking guides
- Combining parking assistant system with other safety systems such as vehicle and pedestrian detection to aid in development of autonomous functionality

Electronic Systems Engineer, Illini Motorsports | Champaign, IL — August 2020 – December 2020

- Used the MPLAB X development environment and XC32 compiler with a Microchip 32-bit microcontroller to create an automated paddle-shifter gear control module, custom steering wheel and power distribution module

PERSONAL PROJECTS

BackTap, Android app that detects taps on the back of a phone to perform actions

- Reads data from an Android phone's accelerometers to detect double and triple taps on the back of a phone which can then call on various functions

Pathfinding Visualization, Program to visualize the A* and Dijkstra's algorithms

- Users can draw a map on a grid and the program will then draw the shortest path from start point to finish point around obstacles