**Vinodh Nagarajan**

[vinodhn2@illinois.edu](mailto: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