# VINODH NAGARAJAN

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#### EDUCATION

## University of Illinois at Urbana-Champaign

Champaign, IL

B.S. in Computer Science & Mathematics · GPA: 3.65 / 4.00

Expected Dec. 2022

Relevant Coursework: Algorithms and Models of Computation, Data Structures, Software Design Studio, Applied Linear Algebra, Differential Equations

#### TECHNICAL SKILLS

Languages: Kotlin, Java, Python, C/C++, SQL, JavaScript, HTML/CSS

Frameworks: JUnit, Catch2, Spring Boot, Apollo GraphQL, Docker, Jetpack Compose, React

Developer Tools: Git, Jira, Jenkins, Gradle, AWS, Docker, Heroku

#### WORK EXPERIENCE

Glassdoor Inc.

## Software Engineering Intern

Jun. 2021 - Aug. 2021

San Francisco, CA

• Migrating API from legacy Ajax calls and RESTful API to a federated Apollo GraphQL service to modularize API, reduce payload size, and reduce server load

 Assisting in the deprecation of major legacy application to simplify system design and streamline process from user interaction to server response

#### Course Assistant: Department of Computer Science

Jan. 2021 - May 2021

University of Illinois at Urbana-Champaign

Champaign, IL

- Mentored over 300 students on best coding practices including, but not limited to, code style, object decomposition, good object-oriented program design and unit testing in Java and C++
- Moderated weekly code reviews with groups of 5 students at a time, providing feedback and grading students on code functionality, readability, and structure

## PERSONAL PROJECTS

## Course Info Chatbot

Mar. 2021 - May 2021

Kotlin, Gradle, Heroku Dyno

- Developed an chatbot for the Telegram messaging platform for a convenient method of getting course information such as credit hours, description, average GPA, and more
- Challenges included parsing the XMl and JSON responses from the University of Illinois API in an efficient manner and creating a Heroku dyno to act as a webhook for fast and low-latency responses

BackTap Jun. 2020 - Aug. 2020

Kotlin, Jetpack Compose, Gradle

- Developed an Android application to allow users to tap on the back of their phone to call on various system functions
- Challenges included filtering sensor data to avoid false positives and managing the application's efficiency and power consumption to reduce strain on battery

# Blockstar (LAHacks 2021)

Mar. 2021

C++, JavaScript, Google Cloud Platform, GitHub Actions

- Developed a product review system that would verify user purchases and analyze existing reviews for signs of bias, unnatural speech, and other patterns
- Challenges included implementing a blockchain system to verify user purchases and fine tuning up the ReivewMeta API to detect bias, unnatural speech and other patterns efficiently

#### EXTRACURRICULAR ACTIVITIES

## Software Engineer

Feb. 2021 - Present

Illini EV Concept

Champaign, IL

• Using OpenCV and Python to develop a driver assistance system to improve driver spatial awareness on the road and take over vehicle control on highways and local roads

### **Electronic Systems Engineer**

Aug. 2020 - Dec. 2020

Illini Motorsports - Formula SAE

Champaign, IL

• Developed an automated gear control module and custom steering wheel to reduce gear shift times by 50% and improve vehicle control-ability at high speed