# 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, Maven, 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, 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 as 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 Course Explorer API in an efficient manner and creating a Heroku dyno to act as a webhook for fast, 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 maximizing application efficiency and reducing power consumption

# Blockstar (LAHacks 2021)

Mar. 2021

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

- Developed a product review system to verify user purchases and analyze existing reviews for signs of bias, unnatural speech, and other fraudulent patterns
- Challenges included implementing a blockchain system to verify user purchases and fine tuning the ReviewMeta API to detect a variety of patterns known to be present in fradulent reviews

## EXTRACURRICULAR ACTIVITIES

## Software Engineer

Feb. 2021 - Present

Champaign, IL

Illini EV Concept

• 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