# Vinodh Nagarajan

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#### EDUCATION

University of Illinois at Urbana-Champaign

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

Champaign, IL 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++, JavaScript, HTML/CSS, R Frameworks: Jetpack Compose, React, JUnit, Catch2, Spring Boot

Developer Tools: Git, Jira, Jenkins, Gradle, AWS, Docker, Heroku, Android Studio, IntelliJ

#### WORK EXPERIENCE

#### Glassdoor Inc.

Mill Valley, CA (Remote) Jun. 2021 - Aug. 2021

 $Software\ Engineering\ Intern$ 

• Migrating features from existing Ajax calls and REST API to a GraphQL service to reduce server response time, server load and network bandwidth usage

## University of Illinois at Urbana-Champaign

Course Assistant: Department of Computer Science

Champaign, IL (Remote) Jan. 2021 - May 2021

- 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

### BackTap | Kotlin, Jetpack Compose, Gradle, Android Studio

- Developed an Android application in Kotlin with Jetpack Compose for the UI
- Created an accessibility service to poll and filter accelerometer sensor data and call on various Android system functions when taps are detected on the back of a phone

## Course Info Chatbot | Kotlin, Gradle, Heroku Dyno, IntelliJ IDEA

- Developed an chatbot for the Telegram messaging platform with a Kotlin backend
- Utilized a webhook to react to user commands and call on the University of Illinois Course Explorer API to return course information such as number of credit hours, average GPA from previous semesters and more

### Blockstar (LAHacks 2021) | C++, JavaScript, Google Cloud Platform, GitHub Actions

- Developed a full-stack trusted product review system with JavaScript in the frontend and C++ in the backend
- Implemented a blockchain on Google Cloud Platform to verify user purchases and validate reviews
- Set up continuous integration through GitHub Actions to allow team members to more effectively split up work and focus on different aspects of Blockstar

## Wink (HackOHI/O 2021) | Flutter, Dart

- Developed a cross-platform mobile application with Dart and Flutter for the UI
- Utilized positive reinforcement among other psychological techniques to encourage and reward users for focusing more on their work and improving their sleeping habits on a night to night basis

#### EXTRACURRICULAR ACTIVITIES

## Illini EV Concept

Champaign, IL Feb. 2021 - Present

Software Engineer

 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

## Illini Motorsports - Formula SAE

Champaign, IL

Electronic Systems Engineer

Aug. 2020 - Dec. 2020

 $\bullet$  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