Vinodh Nagarajan

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EDUCATION

University of Illinois at Urbana-Champaign   Champaign, IL
B.S. in **Computer Science & Mathematics** · GPA: 3.44/4.00   Expected Dec. 2022
Relevant Coursework: Algorithms and Models of Computation, Data Structures, Software Design Studio,
Applied Linear Algebra, Differential Equations, Numerical Methods

EXPERIENCE

Incoming Software Engineer Intern   May 2022 - Aug. 2022
Atlassian   Mountain View, CA

Software Engineer Intern   Jun. 2021 - Aug. 2021
Glassdoor   San Francisco, CA

- Worked with a team of senior managers and lead software engineers to deprecate monolithic legacy application to simplify system design, increase modularity and improve overall site reliability
- Built a GraphQL API with Spring in Java to handle data queries and mutations for company benefit information
- Implemented a federated Apollo GraphQL service with Java, SQL and XML to create a unified API across all Glassdoor services to improve overall API response time by up to 20%
- Performed testing of API functionality with JUnit and Mockito to ensure reliable application performance in QA and Stage environments before deploying to production

Undergraduate Course Assistant   Jan. 2021 - May 2021
University of Illinois at Urbana-Champaign   Champaign, IL

- Mentored 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 small groups of students, providing feedback and grading students on code functionality, readability, and structure
- Participated in random weekly audits to ensure that all course assistants were grading students fairly and were holding all students to the same standards

PROJECTS

Illini Info Chatbot | *Kotlin, Gradle, Heroku*
- Developed a chatbot for the Telegram messaging platform as a convenient method of getting course information such as course description, number of credit hours, average GPA from past terms, and more
- Challenges included parsing XML and JSON responses from the University of Illinois' official API in an efficient manner and creating a Heroku dyno to act as a webhook for fast, reliable responses

BackTap | *Kotlin, Jetpack Compose, Gradle*
- Developed an Android application to allow users to tap on the back of their phone to perform various system functions such as switching apps, turning on the flashlight, etc.
- Challenges included filtering sensor data to avoid unintended activation, maximizing application efficiency, and reducing overall power consumption to be within Android system limits

BlockStar | *C++, JavaScript, Google Cloud Platform, GitHub Actions*
- Developed a product review system to verify user purchases to legitimize reviews and analyze existing online reviews for signs of bias, unnatural speech and other fraudulent patterns
- Challenges included implementing a secure blockchain system to verify user purchases and modifying the ReviewMeta API to reliably detect a variety of speech patterns known to be present in fraudulent reviews

TECHNICAL SKILLS

Languages: Kotlin, Java, Python, C/C++, SQL, JavaScript, HTML/CSS, R
Frameworks: JUnit, Catch2, Mockito, Spring, Apollo GraphQL, Jetpack Compose, React
Developer Tools: Git, Docker, Jira, Jenkins, Gradle, Maven, Heroku, VS Code, IntelliJ, Android Studio