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, R
Frameworks: JUnit, Catch2, Spring, Apollo GraphQL, Jetpack Compose, React
Developer Tools: Git, Docker, Jira, Jenkins, Gradle, Maven, Heroku, AWS, VS Code, Visual Studio, IntelliJ

EXPERIENCE

Software Engineering Intern — Jun. 2021 - Aug. 2021
Glassdoor Inc. — San Francisco, CA

- Built a GraphQL API with **Spring** to handle queries and mutations for company benefit information generated by both companies and users
- Implemented a **federated Apollo GraphQL service** with **Java, SQL and XML** to create a unified API across all internal microservices to allow for queries and mutations to and from a variety of databases
- Worked with a team of senior managers and lead software engineers to deprecate monolithic legacy application to simplify system design and increase modularity
- Designed and performed unit testing of API functionality with **JUnit** to ensure reliable application performance with graceful error handling and

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 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 Dyno*

- Developed a chatbot for the Telegram messaging platform as a convenient method of getting course information from the University of Illinois such as number of credit hours, average GPA, 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 mimic iOS 14 functionality by allowing users to tap on the back of their phone to perform various system functions
- Challenges included filtering sensor data to avoid false activations, maximizing application efficiency, and reducing overall power consumption to be within Android system limits

BlockStar (LA Hacks 2021) | *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