BYRON RICHARDS

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EDUCATION

University of Virginia   *Charlottesville, VA*
Bachelor of Arts, Computer Science   *Expected May 2024*

Relevant Coursework: Data Structures & Algorithms, Computer Systems & Organization, Discrete Mathematics & Theory, Cyber Security, Software Development Essentials, Databases, Human Computer Interaction, Data Visualization, Web Development, Data Science, Statistics, Microeconomics, Macroeconomics.

WORK EXPERIENCE

Software Engineer, IT Concepts   *June 2023 - present*
- Utilized AWS services, including AWS Lambda, S3, API Gateway, and DynamoDB, to construct a scalable backend infrastructure for IT Concepts, facilitating efficient data management and storage.
- Developed a mobile application using React Native and Expo framework to provide company employees with convenient access to news updates and notifications, optimizing internal communication and enabling seamless information retrieval on mobile devices.
- Designed and executed a secure website for office sign-ins, leveraging various UI libraries and integrating face recognition technology using TenserFlow's face-api.js. This ensured reliable user authentication and verification during login and logout processes, enhancing security and user experience.

Software Engineer, Forge   *Sep 2023 - present*
- Engineered a full-stack platform leveraging Next.js, TypeScript, and Airtable, facilitating connections between students and employers by enhancing user experiences and streamlining data management.
- Collaborated in an Agile environment, utilizing Trello for comprehensive task management and actively participating in weekly stand-ups to ensure alignment and drive project momentum.
- Contributed to the continuous improvement of development processes by engaging in code reviews, optimizing application performance, and implementing best practices in software development.

Software Engineer Lead Instructor, Forge   *May 2023 - present*
- Instructed 30 college students across the U.S. in a 120+ hour software engineering internship program covering Git, JavaScript, React, APIs, and Express, with a focus on best coding practices.
- Designed and taught an AI course, culminating in a crash course where students developed a chatbot for Babylon Micro Farms using OpenAI Assistants API, improving customer service.
- Set to be lead instructor for the 2024 internship program.

Computer Systems and Organization Teacher's Assistant, UVA   *January 2023 - May 2023*
- Developed students' understanding of a wide range of topics including computer hardware design, from gates and registers to general-purpose computers. Taught data representation from bits and bytes to records, arrays, and pointers. Covered process representation from circuits and assembly to the C programming language.
- Administered course grading for 482 students and facilitate office hours to help answer students' questions.
- Educate students how to work in the command-line, code in C, and identify potential security vulnerabilities that may arise from buggy-code during the software development process.

PROJECTS

- Built a sign-on app with React and TypeScript, using UI libraries like Shadcn and MaterialUI. The app featured face recognition for sign-ins and sign-outs, with face data stored in AWS S3. Also used AWS Lambda, DynamoDB, and API Gateway for backend services.
- Launched a personal blog website using Next.js, with content stored in AWS DynamoDB. Employed Lambda and API Gateway for efficient data retrieval and management.
- Developed a user-friendly web application utilizing React, integrating a chatbot feature that leverages the OpenAI API, demonstrating the practical application of AI in enhancing user interactions and experience.

SKILLS & ACCOMPLISHMENTS

Programming Languages: Java, JavaScript, TypeScript, Python, Bash, X86 Assembly, C, SQL, R
Frameworks and Tools: React JS, Express.js, Next.js, Tableau, AWS, RAWGraphs, Git, Microsoft Office (Excel, PowerPoint, Word), Docker.
Accomplishments: Rowed in the Semi-Final for the British Rowing Championships; Two-time soccer state champion; Captained varsity tennis team to state finals.