Jammel Yeboah

ecr7kd@virginia.edu | linkedin.com/in/jammel-yeboah | 571-573-2200 | github.com/jammel-yeboah | jammelyeboah.dev

Education

University of Virginia | Charlottesville, VA Expected Graduation: May 2026

Bachelor's in Computer Science and Statistics, Minor in Real Estate, GPA **3.89**

Relevant Courses: Computer Architecture, Regression Analysis, Compilers, Computer Networks, Data Structures and Algorithms, Discrete Mathematics, Advanced Software Development

Experience

Netflix | Los Gatos, CA *May – August 2024*

Software Engineer Intern

- Built a C++ agent to collect AWS EC2 metrics via CloudWatch, feeding data into Netflix Atlas for 100+ internal services
- Engineered data pipeline with Java/Groovy scripts, aggregating 1TB+ daily metrics into PostgreSQL/CockroachDB
- Developed React TypeScript dashboard visualizing service metrics, reducing resource allocation decision time by 50%
- Innovated a Slack bot alert system for latency, availability, and CPU performance anomalies, cutting average incident response time from 30 to 10 minutes and potentially saving Netflix millions in operational costs

Zocdoc | New York, NY *June – August 2023*

Software Engineer Intern

- Engineered a full-stack multi-step questionnaire for dentist seekers, boosting bookings, appointments, and positive reviews
- Utilized React TypeScript for building front-end components and triage flow, and C# in introducing new GraphQL endpoints
- Conducted smoke, unit, and API testing, ensuring software stability and leading to a smoother user experience
- Established A/B testing metrics, monitored trends with Sentry and Datadog, and adjusted development strategy accordingly

Natera | San Carlos, CA *May – August 2022*

Software Engineer Intern

- Engineered a Django-based Learning Management System, streamlining Continuing Education for employees
- Proposed and developed an automatic certificate generation system using Python, reducing certification time by over 50%
- Strategically utilized AWS S3 for the streamlined storage and organization of user media, certificates, and templates

Projects

32-bit Operating System *April 2024 – Present*

- Built OS from scratch, implementing process management, system calls (fork(), exec(), wait(), exit()) using C and Assembly
- Engineered a preemptive CPU scheduler based on the Completely Fair Scheduler (CFS) algorithm, utilizing red-black trees for O (log n) task selection complexity
- Developed low-level interrupt handling and context switching routines for efficient multitasking and preemptive scheduling
- Plan to expand OS with virtual memory management (paging, TLB), multi-CPU support, and user-level threading library

NFT Minting in Augmented Reality *April – August 2022*

- Developed a cross-platform (Android/Windows) Web3 app using Solidity, C#, and Unity for creating NFTs in AR
- Implemented Solidity smart contracts for secure user authentication, NFT creation, and Polygon network integration
- Designed an immersive AR experience for loot box placement, NFT minting, and storage in users' decentralized wallets

Extracurriculars / Activities

USACO | Platinum Participant *December 2023*

Hudson River Trading | *Inside HRT Participant* *April 2024*

Citadel and Citadel Securities | *Discover Citadel Participant* *April 2024*

ColorStack | Member *September 2023 – Present*

UVA Black Student Alliance | Academic and Career Development Committee *September 2023 – Present*

National Society of Black Engineers (NSBE) | Member *September 2023 – Present*

Skills

Programming Languages: Python (NumPy, Pandas, SciPy), C/C++, Java, C#, JavaScript, SQL, GraphQL, Bash, Assembly (x86)

Tools and Technologies: Git, AWS, Docker, Kubernetes, Linux, Node.js, React, Django, OpenMP, MPI, TensorFlow, PyTorch