AURORA V. HART

Backend Engineer

✉ aurora@aurorah.art   in LinkedIn   ⌂ github.com/aur9ra   ◆ San Francisco, CA

Summary

Passionate software engineer with experience designing and scaling backend systems for longevity and stability. I enjoy diving deep into technically complex problems, fueled by curiosity (and coffee), and I thrive when collaborating with talented engineers to build brilliant products.

Experience

AVEVA   **San Leandro, CA**
Software Engineer Intern   *June 2023 - September 2023 & June 2024 - September 2024*

- **Standardized automated testing across AVEVA's global cloud infrastructure:** Partnered with teams spanning multiple continents to design and integrate deployment-stage testing helpers for mission-critical systems. This initiative established consistent quality standards across cloud environments, making deployments more reliable and freeing engineers from manual verification.
- **Delivered monthly Azure cost savings exceeding $15,000:** Strategically re-architected high-cost segments of infrastructure, identifying waste and optimizing workloads. These changes improved performance while delivering significant ongoing savings, proving that robust engineering can align with fiscal responsibility.
- **Expanded AVEVA's global Resource Management system with API routing expansions:** Expanded AVEVA's internal Resource Management system by designing dozens of new API routes to cover previously unaddressed use cases. These improvements unlocked critical functionality for employees and stakeholders, making the system more usable and resilient.

University of California, Santa Cruz   **Santa Cruz, CA**
Web Developer, Staff & Human Resources   *December 2021 - November 2022*

- **Built backend infrastructure for non-technical staff:** Independently engineered a system that integrated with UCSC's ServiceNow platform, enabling hundreds of staff members to manage web content directly. By simplifying a process that was once complex and error-prone, this tool saved hundreds of hours and eliminated recurring bottlenecks.
- **Drove automation for 7,000+ web updates:** Developed automation that processed thousands of legacy requests, reducing manual effort to nearly zero. As a result, employee satisfaction ratings skyrocketed from 38% to 95% in less than a year, while the team recaptured an estimated 800+ hours annually.
- **Reduced web content update time by over 95%:** Transformed update timelines from 6 business days to just 5 hours across 1,000+ updates. This dramatic efficiency gain empowered UCSC to communicate faster during the COVID-19 pandemic and keep online resources consistently up to date.

Juni Learning, Hackingtons Corporation   **Remote**
Computer Science Instructor   *August 2022 - May 2023*

- **Empowered academic success for 400+ children, ages 6 to 17:** Delivered personalized and group instruction in Python, Java, C#, C++, web technologies, and databases.
- **Expertly taught diverse programming languages and tools:** empowered 100+ students to create 70+ working games and applications, transforming curiosity into real projects.
- **Made coding approachable and exciting:** Spearheading the .NET application course and the Unity course at Hackingtons, I was in charge of empowering more than 100 students to develop advanced, concrete C# skills. Facilitated the successful creation and production of 70+ applications and games, translating students' dreams into tangible results.

Projects

Plainsight *(Project Lead, Acquired by Cloud 9)*   **December 2015 - January 2017**

- **Developed low-intensity memory inspection and recording tools in C:** Engineered an ultra-fast, low-overhead system to extract real-time gameplay data from many of the world's most popular e-sports titles while meeting the extreme low-resource usage requirements of an e-sports environment. Collaborated with statisticians and various e-sports analyst experts.
- **Built a network-synced time-series database:** Developed a feature-rich analytics platform with pre-integrated statistical functions and modeling capabilities, enabling real-time insights for coaches, players, and broadcasters. Supported live esports broadcast, giving live data to an audience of millions.

Data Structures & Algorithms in Python, a Juni Learning Course   **January 2023 - February 2023**

- **Developed and instructed a comprehensive DS&A curriculum:** Created a multi-month course aimed at teaching the foundations of Data Structures and Algorithms (DS&A) to students with limited mathematical experience. The curriculum covered a wide range of topics, including Arrays and Linked Lists, Stacks and Queues, Trees, Recursive Algorithms, Hashing, Graphs, and Dynamic Programming, catering to students from diverse educational backgrounds.
- Over 1,000 students have successfully completed the course.

Technical Skills

Languages: Python, C#, C++, C, Java, JavaScript/TypeScript, Elixir, Rust
Developer Tools: Linux, BASH, Git, Docker, Kubernetes, Postman, Unity, Prometheus, Grafana
Technologies/Frameworks: Backend Web Frameworks (Django, ASP.NET, Node.js), Linting & Static Analysis (ESLint, Clippy, SonarQube), React, Databases (MySQL, MongoDB, Redis, PostgreSQL), Microsoft Azure, Test Automation (Jest, Pytest, NUnit), GraphQL