

DANIEL ARTHUR DUKESHIRE

Arlington, MA | (603)-918-7348 | danieladukeshire@gmail.com | <https://www.linkedin.com/in/danieldukeshire>

EXPERIENCE

NetApp | Member of Technical Staff, Software Engineer II (July 2022 – Present)

- Spearheaded efforts to enhance cloud background IO performance within the ONTAP RAID storage system, focusing on transitioning from an IO interval-based approach to a throughput rate (IOPS) basis. This transformation provided users with configurable options, allowing them to optimize the system's performance based on their specific requirements.
- Designed and architected a virtual simulation framework, leveraging Python's testing libraries and tools to create a robust and scalable testing environment.
- Implemented a suite of virtual simulation tests to validate RAID operations, including data redundancy, parity calculations, fault tolerance, and data reconstruction.
- Collaborated with the development team to identify critical RAID processes and their dependencies, ensuring comprehensive test coverage for essential functionalities, and the reliability and resilience of the RAID subsystem.
- Actively monitored and analyzed system performance metrics, comparing the results obtained from virtual simulation unit tests against the expected improvements in IO throughput based on the new approach.
- Acted as a subject matter expert on virtual simulation unit testing and throughput-based IO performance, providing guidance and support to colleagues, and fostering best practices within the team.

Ellington Management Group | Software Engineer (May 2021 – July 2022)

- Initiated the design, development, and maintenance of mission-critical applications supporting multiple business units across the fund as a dedicated Full-Stack developer.
- Analyzed and responded to front-office traders' requests to enhance and customize an internal portfolio management system and accounting codebase, delivering tailored solutions to meet their specific needs.
- Developed intuitive web interfaces using JavaScript + jQuery, effectively modeling data for comprehensive desk analysis and enabling seamless user workflows.
- Expanded quantitative research capabilities by implementing enhancements and optimizing workflows within Microsoft SQL Server, facilitating more efficient data analysis and decision-making processes.
- Managed a complex proprietary trading system in C# .Net Core, ensuring its stability and performance while supporting day-to-day operational processes within the CMBS trading desk.

SKILLS

Programming Languages: C, C++, Python, SQL, C#, JavaScript

Web Development: .NET Framework, HTML, CSS, jQuery, Bootstrap, DevExpress

Other: Linux, GitHub, Azure DevOps, Perforce Helix Core (P4), Confluence, Jira

EDUCATION

Rensselaer Polytechnic Institute

Troy, NY

B.S. in Computer Science

Class of 2021

GPA: 3.5 / 4.0

Awards & Honors: Cum Laude, Dean's Honor List 2017 - 2021, National Society for Leadership and Success, A.L. Love III '42 Scholarship, Rensselaer Leadership Award, Liberty League All-Academic.