

# Travis Dean

## Software Engineer

<b>Contact</b> 434-381-0420 t.joseph.dean@gmail.com	<b>Summary</b> Strong applications and systems programmer across multiple languages and platforms. Experienced at working with stakeholders, engineers, and contractors to optimize points of friction and deliver exceptional results. Skilled network and systems engineer with the goal of automation, error-reduction, productivity, and security.
<b>Education</b> University of Virginia B.A in Computer Science CS 4993 – Independent Study (Machine Learning) CS 4810 – Computer Graphics CS 4710 – Artificial Intelligence CS 4501 – Language Design and Implementation CS 4414 – Operating Systems	<b>Experience</b> RetiVue • Feb. 2017 – April 2019 • Software Engineer  Hired as a C++ applications programmer, I focused on algorithm development, GPU acceleration, hospital database integration, and interoperability with custom microcontrollers. Our speed and quality improvements to off-the-shelf image processing algorithms became part of US Patent 10,258,232.  I led the initiative to modularize our codebase, creating a web-based cross-platform interface using JavaScript and C# for patient and data review to replace the existing system. This architecture allowed us to utilize Azure Active Directory SSO for user management, as well as providing the same interface to our clients and our internal research team.  I created the backend using a combination of open-source healthcare server platforms, custom scripting in Powershell, Bash, and Python, and containerization technology such as Docker. I also used this backend for our dev / prod release deployment process, enforcing stringent healthcare requirements on versioning, reproducibility, and correctness checking.
<b>Key Skills</b> Software Architecture CI/CD Pipelines Documentation Hardware Integration Cloud Infrastructure	<b>Communication and Leadership</b>  In order to coordinate efforts with our Chinese manufacturing firm, I moved our company to Azure's platform. I setup and maintained the domain for our company, giving us benefits including Team's auto-translation, Sharepoint's extensive documentation, and managed security. This also simplified eventual integration with our clients' domains, allowing federated sign-in.  I also transitioned our development team to Azure's DevOps tools, which made meeting HIPAA documentation requirements easier and simplified testing and quality verification. The direct and indirect benefits of these changes helped increase the cadence of our prototype manufacturing and design from months to around a week per prototype.

## References

Dr. Paul Yates	CEO of RetiVue	pyates@retivue.com	434-260-2836
Alex Martinez	RetiVue Software Team Lead	amartinez@retivue.com	804-926-3713
Jeff Dubrow	Contracting and Collaboration	doc@zillog80.com	248-914-1289