

Lifelong engineer, tinkerer, and wonderer with 12+ years of professional experience as a Software Engineer and another 10+ years experience tinkering with computers and code before that. **Areas of expertise:** Regulated software, medical devices, GPGPU, .NET desktop applications.

EXPERIENCE

Software Engineer I-III

H&A Scientific, Inc.

May 2012 — Feb 2024

Greenville, NC

- Enhanced the speed of an internal application by replacing the entire data layer with Entity Framework. Multiple-minute queries reduced to sub-second response times.
- Designed the migration procedure to move and upgrade an uncontrolled/undocumented on-premises domain controller to a new physical/virtual machine combination, leaving the new machine well-documented and under change control. Also lent technical assistance in replacing local backups with cloud backups.

Lead Developer — Certes™ by Perfusio™

perfusio.com

- Developed real-time proof of concept based on customer's retrospective research to determine feasibility of project.
- Identified user requirements by working through expected use with customer.
- Developed application according to company quality system and operating procedures, delivering a WPF user interface, a C++/CUDA computational library, and an MSSQL database.
- Worked with Validation to train on features and to identify, diagnose, and correct bugs found while testing.
- Documented application structure with design specifications, created administrative guide documentation, and provided resources for end-user usage guide.

Developer — SLIM (Stability Lab Information Manager) by H&A Scientific, Inc.

hascientific.com/our-products/slim/

- Collaborated with team to determine which features to add to the next version of the product.
- Developed assigned new features in C++ MFC client and Oracle database backend.

Intern/Developer

Neil Medical Group

2007 — 2012

Kinston, NC

- Troubleshooted and automated various business tasks
- Developed utility applications to assist less technical users
- Updated internal ColdFusion site to ASP .NET

EDUCATION

Master of Science, Computer Science, East Carolina University

2012

Bachelor of Science, Computer Science, East Carolina University

2010

Bachelor of Science, Mathematics, East Carolina University

2010

Associate of Arts, Pre-Liberal Arts, Pitt Community College

2006

TECHNICAL SKILLS

Languages

C++, C# .NET, T-SQL, Powershell, Python, JavaScript/Typescript, HTML5/CSS, Java, Rust, Go, \LaTeX

Databases

MSSQL, Oracle DBMS, PostgreSQL

Technologies

NVIDIA CUDA, HDF5, Containers, Node.js, Angular, GraphQL

Tools

Visual Studio, Visual Studio Code, Microsoft Office, Git, Emacs

Operating Systems

Windows, Windows Server, Linux