

STEPHEN G. DONCHEZ

Cleared Systems Engineer with a background in Embedded Systems, Cyber Security, and Model Based Systems Engineering, passionate about leadership and learning.

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TECHNICAL SKILLS

- Systems Engineering Experience: OCSMP-MU Certified in MBSE – Cameo Systems Modeler, Requirements Management – IBM DOORS. Experienced in full development lifecycle from Architecture Development through I&T
- Coding Experience: VHDL, SQL, C++, C, PHP, Git, Assembly (various architectures), Bash Shell (Linux), Matlab, HTML, CSS, JavaScript (Vue, jQuery), Python, Arduino, Java, XML, PowerShell
- Hardware/Software Development Concepts: FPGA and microprocessor control, fundamentals of AC and DC circuit design and analysis, Agile lifecycle, Waterfall development lifecycle, containerization/orchestration technologies, networking and routing

WORK EXPERIENCE

Member of the Engineering Staff/Systems Engineer, *L3Harris Technologies* 2022 - Present

- Work to architect, design, implement and integrate embedded systems providing a varied set of features for land, sea, air, and space environments, with an emphasis on cybersecurity and information assurance capabilities
- Regularly lead formal design reviews and interact with customers and government agencies on \$10,000,000+ programs to convey technical progress, resolve ambiguities, and facilitate product certification
- Interface with Software, Firmware, Electrical, and Mechanical Engineering teams to ensure successful design implementation and integration for complex systems and solutions

Systems Engineering Intern, *L3Harris Technologies* 2020 - 2022

- Aided in the integration of a next generation Electronic Warfare (EW) system
- Performed in-depth reviews of technical drawings and specifications
- Interfaced with outside vendors to address design discrepancies
- Worked to perform threat simulations in an anechoic environment

Systems Engineering Intern, *Harris Corporation* 2019

- Performed a comprehensive risk management analysis of an electronic warfare (EW) system
- Authored and performed unit and integration testing on EW systems to certify them prior to release
- Performed design documentation work on EW hardware
- Evaluated various software techniques for operating environment configuration and deployment

Software Engineering Intern, *Harris Corporation* 2018

- Aided in the development of software across all levels of design (from OE configuration to app development)
- Performed unit testing on prototype hardware in the EW domain
- Obtained (and maintain) Secret Security Clearance

President Emeritus and Head Technician, *Villanova University Tech Crew* 2016-2022

- Oversaw the day-to-day operations of a \$100,000/year student run organization within Villanova University, including client interaction, equipment purchasing and maintenance, financial management and budgeting, and personnel management, as well as strategic and long-term business development
- Provide event production services for a variety of clients within Villanova University, including concert scale sound, video, and lighting systems
- Install and operate small and large-scale event production systems on a weekly basis

EDUCATION

Villanova University, Villanova, PA 2020-2022

Master of Science in Computer Engineering, GPA: 3.91

Publications:

- An Efficient and Secure Architecture for FPGA-Based Multi-Tenant Cloud Applications (Master's Thesis)
- Memory Isolation for Multi-Tenant Data Integrity in Cloud MPSoC FPGAs (published in the proceedings of 13th annual International Conference and Workshop on Computing and Communication)
- Dynamic Scheduling of AES Cores for Aperiodic Tasks on Multi-tenant Cloud FPGAs (published in the proceedings of the IEEE International Conference on Trust, Security, and Privacy in Computing and Communications (TrustCom) 2023)

Villanova University, Villanova, PA 2016-2020

Bachelor of Science in Computer Engineering, Computer Science Minor, GPA: 3.85 (Magna Cum Laude)

Projects:

- Secure Remote DPR Architecture for Embedded Systems – designed and implemented an architectural solution for secure remote dynamic partial reconfiguration of heterogenous embedded systems
- PrintCheck3D – Developed a 3D printer monitoring and management system that features automatic print failure detection and waste mitigation as well as printer availability information for the Villanova Community