

# Lisa Freeburg

Columbia, MD - Email me on Indeed: [indeed.com/r/Lisa-Freeburg/cdef1561a6e0f38a](https://www.indeed.com/r/Lisa-Freeburg/cdef1561a6e0f38a)

Authorized to work in the US for any employer

## WORK EXPERIENCE

### Software Engineer

Varen Technologies, Inc - Columbia, MD - December 2010 to Present

- Defined requirements for, designed, implemented, tested, deployed, and supported a suite of high-speed high-volume highly-available data processing applications
- Improved time to market, robustness, and consistency by developing a library and programming API for a set of core functions previously implemented locally in separate applications
- Improved robustness and sustainability of fielded legacy applications
- Created simpler and more elegant alternatives to existing complicated designs and implementations while supporting the same requirements
- Worked in a demanding on-site environment that required quick learning of legacy systems and new techniques, interfacing with a large set of constantly changing systems components, collaborating with other organizations, and independently completing large, vaguely-defined tasks

### Software Engineer

The Johns Hopkins University Applied Physics Laboratory - Laurel, MD - March 2001 to December 2010

Laurel MD. March 2001 - December 2010.

- Implemented a scenario description language and code generator to automatically build the C++, C, MATLAB, XML, and HTML required to interface with a modeling and simulation framework
- Assisted with system-level requirements definition for the integration of assets into the BMDS
- Participated in a high-visibility MDA study of time-stepped vs. event-driven simulations for training, performance assessment, and concept definition
- Led the framework design and development effort for a component-based generic radar M&S architecture
- Led the MDA AN/TPY-2 team during 2007 BMDS wargames and exercises. Directed a multi-organizational team responsible for defining event and module requirements, providing SME support, performing model V&V, representing the sponsor at planning sessions, and providing on-site event support. Received a letter of commendation from the sponsor
- Designed and developed an extensible radar simulation testbed framework and a AN/TPY-2 model integrated into the framework. Used the testbed to perform independent analyses of algorithms developed by the IPT and presented my findings at on-site IPT meetings
- Designed and implemented a time-sensitive target cueing subsystem for a real-time distributed mission planner

### Software Engineer

Southwest Research Institute - San Antonio, TX - January 1996 to March 2001

- Provided technical leadership and project management for a distributed real-time synthetic battlefield simulation
- Designed and implemented a 2D mapping subsystem and major portions of the infrastructure of a distributed application used to perform mission analysis for exercises and real-world operations. Worked at the customer site training and supporting users, troubleshooting networks, gathering operational requirements, and providing operational support

- Supported a team responsible for maintaining and enhancing a mission analysis system. Taught a week-long training course to users overseas

## EDUCATION

### **Master of Science in Computer Science in Computer Science**

The Johns Hopkins University

2005

### **Bachelor of Science in Computer Science in Computer Science**

University of Iowa

1995

## SKILLS

C+ (9 years), CMM (Less than 1 year), detail-oriented (Less than 1 year), HTML (9 years), XML (9 years)

## ADDITIONAL INFORMATION

- Senior software developer with 21 years of C++, Java, and Linux development experience
- Application developer with a strong background in architecture and frameworks
- Experience working with DoD clients in the information operations, air defense, BMD, radar, M&S and high-speed data processing domains
- Technical skills: Java, JNI, C, C++, HTML, JSON, Ruby, XML/XSD, UML, CMM/SEI, Agile, Linux
- Frequently embedded with customers and users
- Independent, detail-oriented, highly motivated, requires minimal direction, results oriented
- Excellent verbal and written communication skills