

# AMELIA FEDYK

Software Engineer

Results-driven and skilled Software Developer with a proven track record in software engineering and UI development.

Excels in R&D environments and eager to contribute to DOD government projects.

Recently engaged in a pro bono consulting role and leveraged volunteer positions to enhance technical skills during a career gap.

US Citizen, maintained a Top Secret clearance while at BBN Technologies.

 [GitHub](#)

 [LinkedIn](#)

 [ahfedyk@gmail.com](mailto:ahfedyk@gmail.com)

## SKILLS

Software Design and Backend Development, Object Oriented Design, User Interface Development, Distributed Systems, Real-Time Operating Systems, Data Structures & Algorithms, Problem Solving, Collaboration, Customer Support.

JAVA, JavaScript, JQuery, C, C++, Python, MySQL, Linux OS, VI, Perl, CVS, Subversion, JUnit, CSS, Web Services, Eclipse, IntelliJ IDEA, Visual Studio, Github

## EXPERIENCE

**Software Engineering Consultant**, Inner Dragon Consulting; Greater Boston Area — 2012-2013

- Implemented User Interfaces to facilitate visualization and understanding of dynamic, complex datasets.

**Senior Software Engineer**, BBN Technologies; Cambridge, MA — 1999-2011

- Designed and implemented a Java web-services-based distributed framework for real-time information assurance assessment during transactions, enhancing the security posture of information systems
- Developed UI to support efficient exploration and organization of medical record data from disparate heterogeneous sources for outcome-based analytics
- Modeled logistics demand and inventory management strategies for distributed, multi-agent systems
- Supported customers and external contractors

**Software Engineer**, Raytheon; Marlborough, MA — 1996-1999

- Developed user interfaces (UIs) for the STARS (Standard Terminal Automation Replacement System) Air Traffic Control Situation Data Display
- Teamed with Systems Engineers to design an interface to collect and display information from a time-critical distributed battle simulation test-bed

**Associate Software Engineer**, Xerox; Webster, NY — 1995-1996

- Maintenance Engineer for high speed monochrome and color laser printers
- Represented Print Engine Development Unit at customer sites

## VOLUNTEER EXPERIENCE

**Communication Team/Lead**, Lincoln-Sudbury Regional High School Parent/Guardian Organization; Sudbury, MA — 2020-2023

- Successfully migrated web-portal infrastructure from Joomla CMS to WordPress
- Designed, updated and maintained the organization's website

**Chief Technical Officer**, Learning Disabilities Association of Lake Forest/Lake Bluff; Lake Forest, IL — 2013-2016

## EDUCATION

BS, Computer Science, Summa Cum Laude  
BA, Philosophy, Cum Laude  
St. John Fisher University, Rochester NY

## **Publications**

Patrick Hurley, Partha Pal, Matt Tan Creti, **Amy Fedyk**, “Continuous Mission-Oriented Assessment (CMA) of Assurance.” Fifth Workshop on Recent Advances in Intrusion Tolerant Systems at the 41st IEEE/IFIP International Conference on Dependable Systems and Networks (DSN) June 27, 2011, Hong Kong.

**Amelia Fedyk**, Michael Atighetchi, Partha Pal. “Leveraging ESM Platforms for Continuous Mission- Oriented Assessment of Information Assurance.” The 6th International Conference on Network and Services Management (CNSM 2010), Niagra Falls, Canada, October 2010

P. Collins, **A. Fedyk**, L. Goldston, G. Kratkiewicz, S. Stevens, J. Tustin, “Expanding the U.S. Transportation Command’s Analysis of Mobility Platform (AMP) Federation to Model Aerial Ports of Debarkation (APODs),” Paper No. 06S-SIW-023, Proceedings of the 2006 Spring Interoperability Workshop, Simulation Interoperability Standards Organization, April 2006, Huntsville, AL.

**A. Fedyk**, G. Kratkiewicz, J. Berliner, M. Davis, B. DePass, R. Lazarus, R. Bobrow, “Adaptive Optimization of Solution Time In A Distributed Multi-agent System,” International Conference on Integration of Knowledge Intensive Multi-Agent Systems (KIMAS), April 2005, Waltham, MA.

G. Kratkiewicz, **A. Fedyk**, D. Cerys, “Integrating a Distributed Agent-Based Simulation into an HLA Federation,” Paper No. 04S-SIW-018, Proceedings of the 2004 Spring Interoperability Workshop, Simulation Interoperability Standards Organization, April 2004, Arlington, VA.