✉ ahfedyk@gmail.com
LinkedIn

Amelia Fedyk

GitHub
Website

Profile

Results-driven and skilled Software Developer with a proven track record in software engineering and UI development. Recently expanded expertise into cybersecurity through graduate-level coursework.

Skills

- **Software Development:** Full Stack Development, Object-Oriented Design, Data Structures & Algorithms, Distributed Systems
- **Cyber Security Tools:** Autopsy, FTK, WinHex, Wireshark, LECmd, KAPE
- **UI/UX:** Dynamic and interactive UIs, CSS, JavaScript frameworks, Responsive Design
- **Tools and Platforms:** Linux OS, GitHub, Visual Studio, Eclipse, IntelliJ IDEA
- **Cloud Platforms:** Hands-on experience with leading platforms, including Azure and AWS, leveraging their services for application deployment, cloud infrastructure management, and scalable solutions.
- **Databases & Web Services:** MySQL, SQL, RESTful APIs, JSON, Web Services, API integration
- **Programming Languages:** Java, JavaScript, Python, C, C++, Perl

Experience

Pro Bono Software Engineering, Post Graduate Work — **Greater Boston Area**
2020 - Present

- Created cloud-based applications leveraging Azure and AWS, focusing on scalability, data integration, and dynamic content delivery during graduate coursework
- Gained hands-on experience in forensic investigations through coursework, analyzing digital evidence across platforms including Windows, Linux, macOS, and mobile devices. Explored network activity, email analysis, and memory forensics while adhering to ethical standards in digital investigations.
- Built tools for inventory management and recovery using Java

Inner Dragon Consulting — **Sudbury, MA**
2012 - 2013

- STR, Woburn MA - 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 heterogenous sources for outcome-based analytics
- Modeled logistics demand and inventory management strategies for distributed, multi- agent systems

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

- Developed UIs for the FAA's 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.

Education

University of Massachusetts Lowell — **Lowell, MA**

- Candidate for Graduate Certificate in Cybersecurity (2025) — GPA: 4.0

St. John Fisher University — **Rochester, NY**

- Bachelor of Science in Computer Science — GPA: 3.74
- Bachelor of Arts, Philosophy — GPA: 3.66

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.

Volunteering

Communication Technical Lead, Lincoln-Sudbury Regional High School Parent/Guardian Organization; Sudbury, MA (2020-2023)

Vice Chair, PlaySudbury; Sudbury MA (2017-2020)

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