✉ ahfedyk@gmail.com
LinkedIn

Amelia Fedyk

GitHub
Website

Profile

Results-driven Software Developer with a strong foundation in UI/UX design and development, creating dynamic and intuitive user experiences. Experience in full-stack development, cloud computing, and cybersecurity. Adept at designing responsive, data-driven interfaces that enhance usability and system efficiency.

Skills

- **UI/UX & Frontend Development:** Interactive UIs, JavaScript frameworks, CSS, Responsive Design, Data Visualization
- **Software Development:** Full Stack Development, Object-Oriented Design, Distributed Systems
- **Cybersecurity & Digital Forensics:** Autopsy, FTK, WinHex, Wireshark, LECmd, KAPE
- **Cloud & Infrastructure:** AWS (EC2, S3, Lambda), Azure, Scalable Cloud Solutions
- **Databases & APIs:** MySQL, SQL, RESTful APIs, JSON, Web Services, API Integration
- **Development Tools & Platforms:** Linux OS, GitHub, Visual Studio, Eclipse, IntelliJ IDEA
- **Programming Languages:** Java, JavaScript, Python, C, C++

Experience

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

- Designed and developed cloud-based applications leveraging Azure and AWS, focusing on scalability, dynamic content delivery and security best practices
- Built and optimized interactive user interfaces for data-driven applications, improving accessibility and usability
- Developed inventory management and recovery tools in Java, streamlining workflows and enhancing data visualization
- Gained hands-on experience in digital forensics, analyzing system activity across Windows, Linux, macOS, and mobile environments

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

- STR, Woburn MA – Developed intuitive UI components to support the visualization and analysis of complex, dynamic datasets, improving data-driven decision-making

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

- Designed and implemented a Java web-services-based distributed framework for real-time security assessments, improving system resilience
- Led UI development for a healthcare analytics platform, enabling intuitive exploration of medical records from diverse sources to support outcome-based research
- Developed interfaces for logistics and inventory management systems, enhancing operational efficiency through clear, data-driven visualizations

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

- Developed user interfaces for the FAA's STARS (Standard Terminal Automation Replacement System), providing air traffic controllers with mission-critical real-time data displays
- Collaborated with Systems Engineers to design and implement a data-rich interface for monitoring time-sensitive distributed battle simulations

Education

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

- 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)