

# Sam Walczak

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Phone Number Available Upon Request

## Qualifications

- Ten years of professional experience in software development, DevOps, and cybersecurity on multiple large-scale projects
- Eight years of experience in cloud computing, utilizing multiple cloud providers in both programming and security roles
- Diverse experience in building software using many languages (Python, Java, C#) at varied levels of software abstraction
- Leadership skills in both technology and business settings with a demonstrated ability in achieving organizational goals
- Multiple pending patents related to cloud security, showcasing inventive approaches to solving technical problems
- Bachelor of Science in Information Systems with extensive technical knowledge learned through rigorous coursework
- Cross-cultural communication skills in professional and academic settings amongst a diverse set of business cultures

## Professional Experience

**Department of State**, Washington, DC, *IT Specialist (APPSW/INFOSEC, GS-2210-13)*

October 2024 – Present

Clearance: Top Secret

- Performed as a government technical monitor for enterprise reporting at the Office of Consular Systems and Technology
- Managed the development and maintenance of a consular data analytics platform used at hundreds of consular posts
- Prioritized features, data governance requirements, and technological decisions across three teams and over thirty developers
- Acted as a contracting officer's representative for consular systems modernization, overseeing over \$10,000,000 in funds
- Supported the development and deployment of predictive analytics artificial intelligence model programs for visa adjudication

**AT&T**, Oakton, VA, *Senior Software Engineer/Project Manager (Contract)*

January 2024 – October 2024

- Led AT&T FirstNet's deliverable standardization project, prioritizing automation efforts for hundreds of monthly deliverables
- Identified and implemented areas of automation for dozens of existing reports, improving turnaround and compliance
- Built infrastructure to create reports using Excel, Python, and Power Automate, saving hundreds of labor hours within FirstNet
- Modernized knowledge management and task management practices, increasing project-wide visibility and accountability
- Generated and reviewed multiple deliverables to submit to the FirstNet authority, helping to achieve long-term project goals

**Freddie Mac**, McLean, VA, *Senior Python Development Consultant (Contract)*

June 2023 – December 2023

- Automated ETL processes for counterparty modeling systems, leading to more centralized and visible datasets for stakeholders
- Programmed smoke and performance testing for production-level applications, increasing stability and customer confidence
- Created customer-facing microservices using Python, allowing for on-demand reporting and data-transfer for financial systems
- Provided Python coding expertise for a variety of enterprise initiatives, streamlining software and infrastructure development

**data.ai**, Columbia, MD, *Senior Backend Software Engineer*

June 2022 – April 2023

- Migrated hundreds of backend tasks to a newer Python 3 architecture, securing code while optimizing application runtime
- Developed multiple headless browser applications built with Python on AWS, leading to more accurate metric collection
- Designed and connected microservices for user profiling and credential storage, allowing for easier employee system access
- Rearchitected backend infrastructure to increase observability, enhancing organizational tracing and monitoring capabilities
- Maintained production applications for customer-facing and backend systems, improving site reliability and overall uptime

**Capital One**, McLean, VA, *Senior Software Engineer*

August 2016 – June 2022

### Cloud Security (Cyber)

- Created data loss prevention tools utilizing Python and AWS, scanning petabytes of data to keep the environment secure
- Detected and remediated vulnerabilities in multiple cloud environments, safeguarding thousands of business applications
- Implemented multiple enterprise-wide security tools, including AWS GuardDuty and Macie, securing thousands of accounts
- Standardized and ingested collected data from multiple security platforms, automating ETL processes from beginning to end
- Led the integration of current tools into non-US jurisdictions, navigating nuanced legislation differences for many countries
- Built dashboards for security tool metrics using Python, Snowflake, and Tableau, increasing platform accountability
- Spearheaded best practices and usage standardization campaigns for the cloud, creating a more cost-effective environment

### Java Developer (Recoveries)

- Developed microservices for accepting and ledgering transactions using Java, processing over 10,000 transactions per day
- Built a code deployment pipeline on Jenkins with shell scripting, halving deployment time for more than ten teams
- Bridged mainframe services to the cloud, allowing for unprecedented scalability and cost-cutting for Capital One
- Proposed and implemented zero-downtime deployment using Ansible and AWS, decreasing downtime by 95 percent

**Jacobs**, Chicago, IL, *Environmental, Health, and Safety Information Management Consultant* May 2016 – July 2016

- Integrated EHS systems using C# to automate updating thousands of employees' contact information
- Created safety reports for many clients with customized Windows forms, increasing awareness and mitigating safety issues
- Provided consulting services on IT/OT solutions, decreasing costs and timelines for projects by nearly 30 percent

**Technology Consulting in the Global Community**, Palau, *Student Consultant*, Ministry of Education May 2015 – August 2015

- Developed a system to monitor student progress with PHP, allowing hundreds of teachers to track student development
- Created a PHP application to monitor energy consumption, giving the ministry a clear means to save thousands of dollars
- Integrated learning materials with the local caching system, offering students triple the access to educational documents
- Evaluated and changed the organization's internal IT processes, saving days in the standard IT ticketing process
- Taught programming courses to Palau High School teachers, increasing interest and sustainability for in-house IT projects

**ReSource Pro**, Qingdao, China, *Software Development Intern* May 2014 – August 2014

- Led the development of a customer ticket portal using C#, streamlining processes for more than 1,000 workers' IT requests
- Optimized existing support ticketing system in place, creating a faster, backwards-compatible system for over 30 IT employees
- Participated in efforts to solve company-wide technological issues, preventing employees from losing focus on their work
- Created documentation for company-wide software and practices, organizing over 5 years of content for better reference

**Carnegie Mellon University**, Pittsburgh, PA, *Technology Assistant*, Psychology Department August 2012 – May 2014

- Designed and created dozens of web pages for department faculty and events using HTML, Javascript, and jQuery
- Maintained existing department websites, giving students and faculty reliable access to up-to-date and accurate information
- Worked with local businesses to create an online presence for their services, leading to increased community engagement
- Assembled computers and solved the Psychology Department's technology issues, enabling staff to focus on their work
- Answered questions pertaining to software, helping employees better understand psychology tools such as MATLAB

## Patents

Framework for enhancement of cloud workspace metadata and marking capabilities  
Patent Application Number: 20250045335  
Granted June 2025

Systems and methods for increasing network security related to accessing network services  
Patent Application Number: 20250016162  
Submitted July 2023

Method, apparatus and computer readable media for preservation of cloud object metadata outside of cloud environment  
Patent Application Number: 20240232267  
Submitted January 2023

## Education

**University of Maryland Baltimore County, Baltimore, MD** Expected Graduation: Fall 2025  
M.A. in History, Focus on US-China Relations GPA: 3.97/4  
Thesis: The Peaks and Valleys of Modern US-China Academic Exchange: A 21<sup>st</sup> Century Cooling of US-PRC Relations  
Phi Alpha Theta National History Honor Society May 2024 – Present

**Carnegie Mellon University, Pittsburgh, PA** May 2016  
B.S. Information Systems, B.A. Chinese Studies, Minor in Global Systems GPA: 3.50/4  
Coursework Included: Distributed Systems, Relational Database Management, Object Oriented Programming in Java, Telecommunications Technology Policy and Management, IT Project Management, Web Application Design  
President of the Business Technology Club Fall 2014 – Spring 2016  
Carnegie Mellon Dean's List with High Honors Fall 2013 – Spring 2016

## Skills

**Programming:** Python, Java, Ansible, C, C++, C#, Celery, Cloud (AWS, Azure, GCP), CSS, Cybersecurity, DevOps, Docker, EC2, ETL, Excel, Flask, Git, Go, HTML, Javascript, Jenkins, jQuery, Kinesis, Lambda, Linux, Node.js, NoSQL, Office Scripts, OOP, PHP, Power Automate, Power BI, Redis, Ruby, Ruby on Rails, S3, SML, Snowflake, Spring (Batch, Boot), SQL, Tableau, WinForms, .NET

**Language:** English (Native), Chinese (Professional Working Proficiency)

**Management:** Agile (Scrum, SAFe), Confluence, Excel, Jira, Kanban, Microsoft Office, Project Management