

Abdullah Masood Hakim

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EDUCATION

B.S. Computer Science

Aug 2021 – May 2025

Arizona State University, Tempe, AZ (Magna Cum Laude, Dean's List – Fall 2021, Spring 2022, Spring 2023, Fall 2024.

GPA 3.7

TECHNICAL SKILLS AND CERTIFICATIONS

Programming Languages: Java, SQL, JavaScript, TypeScript, NestJS, Playwright, Python, Django, Node.js, C, C++.

Tools : Cursor, Claude Code , Team City , Sumologic , Datadog , Jira , Confluence, GitHub, Postman.

Relevant Coursework: Software Engineering, DSA, OOPS, DBMS, Principles of Programming, Computer Human Interaction etc.

Languages: English, Japanese, Urdu, Hindi, Kashmiri.

Extracurriculars: Class President, Class Vice President, Extracurricular Head, Lab Head, Event Organizer, Orange Team Captain.

PROFESSIONAL EXPERIENCE

Software Engineer, Gen Digital, Identity and Privacy, Tempe, Arizona.

Jun 2025 – present

Software Engineer Intern, Gen Digital, Identity and Privacy, Tempe, Arizona.

Jun 2024 – May-2025

Skills used: TypeScript, JavaScript, NestJS, HTML, CSS, Playwright, Python, Datadog, Web Scraping, AI Agents, MCP's, AWS, CI/CD

Overview: Worked on 3 main Privacy Core products **Privacy Monitor Assistant, Online Account Cleaner and Unsubscribe Service.**

PMA: Privacy Monitor Assistant

- Solved complex anti-bot and access challenges across databroker scraping workflows, including **Cloudflare protection, IP blocking, Google reCAPTCHA, rate limiting, session expiration, bot-detection flows, and dynamic page rendering.**
- Created an **AI agent-based Databroker monitoring solution** to automatically monitor databroker scan behavior, identify workflow failures, detect recurring issues, and improve visibility into production scan health by fixing and pushing the issue.
- Implemented **proxy-based routing, session rotation, retry logic, request throttling, and enhanced error handling**, increasing scan success rates and reducing repeated broker failures.
- Integrated **100+ additional data brokers**, expanding **Privacy Monitor Assistant (PMA)** scan coverage and improving the breadth and reliability of PII.
- Enhanced **automated opt-out workflows** by **40%** which are triggered after completed scans, enabling removal requests to be submitted more efficiently, reducing manual intervention, and improving the end-to-end user privacy experience.
- Improved scan performance by **35%** by strengthening the proxy failover mechanism, optimizing retry behavior, and making broker-specific scan execution more resilient.
- Continuously monitored and **debugged production workflows**, quickly identifying root causes, deploying fixes, and maintaining stable scan execution across supported brokers.

Privacy Policy Service:

- Built a service used to extract and deliver website privacy policy data, helping customers understand what permissions, data access, and privacy practices websites may have.
- Developed scalable backend APIs and workflows using TypeScript, NestJS, and AWS to support policy extraction, validation, monitoring, and delivery across approximately **1,500 domains**.

Unsubscribe Service:

- Developed a one-click unsubscribe service that allows users to opt-out for unwanted marketing emails. Built the initial proof of concept by adding support for **75 domains** using **AI agents** to execute different unsubscribe actions, improve coverage, and streamline user opt-out flows.
- Later the proof of concept went on to become a product and increased the coverage from **75 domains** to **200+** domains. Also handling multiple unsubscribe flows apart from the one-click unsubscribe.

Undergraduate Teaching Assistant, Arizona State University

Aug 2023 – May 2024

Courses: Object Oriented Programing and Data Structures, Introduction to Programming, Software Engineering

Impactful Skill Enhancement: Applied advanced programming concepts from the course, demonstrating proficiency in C++. Mentored and guided **300 students** in **2 sections**, enhancing coding skills through practical application of object-oriented programming principles.

Lab Session Leadership and Practical Applications: Led **3** weekly lab sessions, engaging a combined **class size of 150 students**.

Developed and executed hands-on exercises translating theoretical concepts into practical applications, fostering impactful learning experiences.

Homework Assistance and Code Review: Offered personalized support during office hours. Conducted rigorous code reviews, providing targeted feedback to improve code quality and adherence to industry best practices.

Exam Preparation in Programming: Orchestrated specialized **exam review sessions**, ensuring comprehensive preparation for programming assessments. Emphasized strategic problem-solving approaches and reinforced key programming paradigms, contributing to increased overall student preparedness and success rates.