

Tyler Watkins

410-499-2683 | Reisterstown, MD | TylerWatkins0513@gmail.com | linkedin.com/in/tylerwatkins0513 | github.com/TylerWatkins0513

EDUCATION

Towson University

Bachelor of Science - Computer Science 3.67 GPA

May 2025

Relevant Coursework: Data Structures and Algorithm Analysis, Software Engineering, Object-oriented programming, Web Application Development, Cryptography, Artificial Intelligence.

SKILLS

Programming Languages: Python, Java, JavaScript, C/C++, SQL, HTML, CSS

Systems: Windows, Linux, MacOS, Git, Bash

Frameworks: Node.js, React.js, REST APIs, Tkinter, Agile

Tools: MongoDB, MySQL, AWS, GitHub, JIRA, Power Automate, Power BI, Firebase

WORK EXPERIENCE

Software Engineer Intern– Johns Hopkins Home Care Group

June 2024- present

- Led the development of a **Python**-based modular desktop application for inventory tracking, increasing workflow efficiency by 45% and ensuring clean, efficient code.
- Automated new-hire ticket creation using **REST APIs**, eliminating manual processing time.
- Executed **SQL** queries to identify and catalog hundreds of previously unrecognized telecom lines, resulting in monthly savings of approximately \$3,000.

Data Analytic Intern- Towson University

August 2023-May 2024

- Architected a **MySQL** database to track and manage information on graduates from Towson University's College of Liberal Arts, enabling more efficient and agile data management.
- Implemented data validation and cleaning techniques using **Pandas**, improving data accuracy by 40%.
- Developed interactive **Power BI** dashboards with DAX to provide actionable insights into alumni relations data.

PROJECTS

Johns Hopkins MIS Inventory Register | Python, MySQL | *Production Application*

- Tkinter-based inventory management application for tracking and management of high-end electronics and peripherals, processing 75+ daily transactions.
- Deployed **MySQL** database architecture supporting real-time inventory updates and historical reporting.
- Created detailed visualizations and tables using Matplotlib and Seaborn for in app dashboards.
- Centralized repository for all MIS department technology assets maintaining records for 500+ devices.

JIRA Ticket Automation | Power Automate, Python, MySQL | *Production System*

- Piloted a **Python** and **SQL** based automation system to streamline JIRA New Hire ticket creation using Atlassian's **REST API**.
- Triggered dynamic issue assignment and priority settings based on ticket parameters, optimizing workflow automation across teams.
- Implemented comprehensive logging and automated email notifications to managers for real-time status updates.
- Currently processing all new hire tickets across two departments, saving 10+ hours weekly of ticket creation while improving tracking consistency.

Towson University Marketplace | MongoDB, Express, React.js, Node.js | [Towson University Marketplace](#)

- A university marketplace for Towson students using **MERN** stack along with **Firebase** for auth.
- Configured search functionality for listings and messaging, enabling easy communication between users.
- Designed the MyListings feature for users to seamlessly view, edit, and delete their listings.

CERTIFICATIONS

AWS Certified Cloud Practitioner, Google IT Automation with Python Specialization