

# Emmanuel Zapata

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## EDUCATION

### University of Virginia

August 2020 – May 2024

B.A. in **Computer Science**; B.A. in **Chemistry**; GPA: 3.44/4.00

Charlottesville, Virginia

- **Relevant Coursework:** Artificial Intelligence, Data Structures, Algorithms, Cybersecurity, Software Dev Essentials, Linear Algebra, Software Testing, Computer Systems and Organization, HCI in Software Dev, Statistical Analysis, Discrete Mathematics
- **Activities/Honors/Languages:** Echols Scholar(Top 5%), Introductory Chemistry Teaching Assistant, Resident Advisor, Fluent in English and Spanish; Intermediate in Italian

## SECURITY CLEARANCE AND TECHNICAL SKILLS

- **Security Clearance:** Active DoD Secret Clearance; Willing to Obtain TS/SCI if Needed
- **Programming Languages:** Java, Python, C, MATLAB, SQL, R, HTML, CSS, JavaScript
- **Technologies:** GitHub, JIRA, Web-APIs, Robot Framework, Amazon S3, AWS CLI, vSphere, Selenium, JUnit, Bash Scripting, PowerShell, AEGIS Combat System, Excel, SQLite, JavaFX, GUI Mapping, JSON

## TECHNICAL EXPERIENCE

### Test Engineer and Automation Developer [ND-1550-02 Level (GS 8 Step 10)]

July 2024 – Present

Naval Surface Warfare Center Dahlgren Division

Dahlgren, Virginia

- Enhanced custom Robot Framework libraries using Python to create human readable Robot Framework test scripts, increasing cross-team understanding and collaboration per Agile Development sprints; Utilized GUI Mapping for Combat System to Virtual Machine interaction
- Implemented and tested requirements both in manual and automated fashion, via use of AEGIS combat system and Robot Framework, leading to a 20% decrease in time for manual testing of 100-250 requirements per test event
- Upheld Agile methodologies via time designated sprints, code reviews, JIRA documentation, and ongoing testing throughout the mission timeline alongside the Software, Systems Engineering, and T&E teams, allowing for a 5% increase in productivity within each step of the Development Cycle
- Documented and coordinated test plans, maintained traceability of requirements, and updated tracking systems to ensure all requirements were properly implemented and verified during test events

### Back End Developer

Jan 2024 – Jun 2024

Spotify Interactive Back End Application (Python, SQLite, SQL, Web-API)

Personal Project

- Implemented a user-friendly command-line interface that allows users to query specific artist data from 500+ artist profiles using the Spotify Web-API, resulting in a 20% increase in user engagement out of 20 test users, with artist provided information; Features include top tracks, albums, genres, Wikipedia redirects, song market information, etc
- Engineered dynamic Web-API key authentication to mitigate token expiration and managed a relational database using SQLite to store up to 2000 artist records, ensuring uninterrupted Web-API access and up to 10% faster querying, leading to increased user satisfaction in learning experience and Application Setup

### Full Stack Developer

Nov 2023 - Dec 2023

Full Stack Course Evaluations Application (Java, JavaFX, SQLite, SQL)

Personal Project

- Developed CRUD application for course review management, enhancing student course enrollment by integrating secure login, dynamic course management, and interactive review systems, which produced an increased satisfaction in course enrollment experience by 25% from a pool of 50 test users
- Architected and executed unit tests using JUnit and Mockito frameworks, achieving code reliability and maintainability, while also decreasing development time by 10% to speak to more stakeholders and iterate based on user feedback

## PRODUCT DEVELOPMENT EXPERIENCE

### UX/UI Developer

Aug 2023 - Dec 2023

University of Virginia Hospital (Figma, Python, Agile Methodology)

Charlottesville Virginia

- Co-led design of UI/UX application named MOPAT, alongside client, Dr. John Eby, streamlining patients' understanding of treatment, ordering of line care supplies, and communication with providers, leading to a predicted 20% future increase in patient to medical professional interaction based on user data collected from 15 healthcare workers/patients
- Created prototypes through identification of work roles, conducting interviews, and developing wireframes, which were refined over multiple Agile iterations based on feedback from 15+ users, resulting in 10% improved user satisfaction and streamlined workflows

## INTERESTS

- Weightlifting, Sports(Baseball, Basketball, Soccer), Video Games, Volunteering, Bartending, Language Learning