

TAYON WILLIAMS

Innovative Software Engineer & Chemist | Solutions-Oriented Lifelong Learner

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SUMMARY

I am a solutions-driven Software Engineer and Chemist with a passion for tackling complex problems and building innovative, efficient systems. My diverse background in full-stack development, AI, and chemical analysis provides me with a unique perspective on problem-solving and blending analytical thinking with technical expertise. Whether optimizing machine learning models, developing scalable applications, or refining processes, I thrive on finding smarter, more effective ways to get things done. As a dedicated lifelong learner, I continuously expand my knowledge through industry certifications, exploring new technologies, and pushing the boundaries of what's possible. Above all, I love collaborating, mentoring, and making a real impact through my work.

SKILLS

Chemical Analysis Techniques: GC-HS, Infrared Spectroscopy, Thin-Layer Chromatography, HPLC, Flash Chromatography, UV-visible spectroscopy, ^1H NMR, pH, Osmolality, Particle Size Diffraction, Total Organic Carbon, FTIR, Differential Scanning Calorimetry

Data Management Software: LIMS, SAP, MasterControl, Empower, Chemstation, Epicor, Salesforce, Square, Trainual, ApicBase

Programming Languages: (*proficient*): JavaScript, Python, HTML5/CSS3, SQL, (*familiar*): Rust, Swift, PHP

Software Tools & Technologies: (*proficient*): Docker, AWS S3, JS Frameworks, Python Frameworks, Git, Figma, Canva, yfinance API

EXPERIENCE

Software Engineer (LLM Training Expert) | Consultant for Outlier AI, Remote *September 2024-Current*

- Developed and optimized machine learning models using JavaScript/Python/Swift/Rust, increasing accuracy.
- Debugged and resolved issues related to model training and deployment, ensuring seamless operation and reducing downtime.
- Documented workflows and created technical guides to assist team members in understanding model functionalities.

Full-Stack Developer | Freelance, Remote *September 2024-Current*

- Redesigned interfaces with modern aesthetics, user-focused principles, and mobile responsiveness, boosting user satisfaction by 20%.
- Improved site visibility and rankings with keyword integration, metadata optimization, and performance enhancements.
- Migrated from an inherited PHP server to Node/Express with JavaScript, improving server performance and maintainability.
- Designed React frontends that enabled support staff to efficiently debug routing, latency, and GRE tunnels in internal and external networks, improving troubleshooting speed.

Founding Engineer & CEO | Men Cry Too, Remote *July 2023-Current*

- Engineered a tech startup generating over \$5,000+, overseeing requirements gathering, and solution architecture.
- Enhanced UI/UX and developed product innovation using React and Python, resulting in optimized platform performance.
- Generated detailed proposals, including cost estimates and technical specifications, to meet investors' and partners' requirements.

Software Engineer Intern | [what i do](#), Remote *April 2024-November 2024*

- Developed a Chai Test Automation Framework to enhance scalability, modularity, and reusability, leading to reduced costs.
- Provided design input and conducted quality testing from prerelease to maintenance for an app with over 100 users.
- Identified and documented inconsistencies in user experience, contributing to a 20% improvement in user satisfaction.

Operations Manager | Ciel Du Miel Brands, LLC, Petaluma, CA *December 2022-June 2023*

- Spearheaded an onboarding training program for new employees, reducing the time it takes to train them by 30%.
- Developed processes for receiving products and inventory management, leading to streamlined operations and reduced errors.
- Assessed budgets to minimize expenses and optimize profits, achieving cost savings and improved financial performance.

Quality Control Chemist III | Element Materials Technology, Santa Rosa, CA *December 2021-December 2022*

- Refactored maintenance of QC SOPs, test methods, analytical validations, reference standard qualification, and stability studies, improving efficiency and accuracy in quality control processes.
- Supervised analytical equipment qualification, calibration, and/or approval of calibration results, enhancing equipment reliability.
- Designed and developed a spreadsheet to record the consumption, purpose, and location of reference standards for maintenance, streamlining inventory management, and reducing errors.

Quality Control Chemist I | The Ritedoese Corporation, Columbia, SC *June 2020-December 2021*

- Conducted trend analysis for out-of-specification results, identifying issues to reduce analyst error from 34% to 15% within a year.
- Wireframed a chemical inventory location sheet to decrease downtime in production due to constant searching for chemicals.
- Successfully supported and led three analytical method validations and transfers within three months.

Analytical Chemist | Colgate-Palmolive, Hodges, SC*July 2017-August 2019*

- Architected a beginner training document for analytical instruments to assist new hires in instrument operation as System Manager.
- Managed a budget of \$250,000 on reagents and LIMS equipment through ordering and arranging training from vendors.
- Conducted training sessions for personnel, ensuring their understanding and precise adherence to Standard Operating Procedures.

Clerk Trainer | QuikTrip Corporation, Athens, GA*June 2013-July 2017*

- Conducted training for personnel, ensuring their understanding and precise adherence to company policy and standards.
- Winner for Best of the Best Customer Service Appraisal and Food Service Appraisal for 2015 and 2016.

PROJECTS**MCT**[Live](#) | [Repo](#)

- Designed a full-stack app where users can join groups, attend events, create a profile with issue-specific tags, and post sharing using full CRUD operations to ensure a perfect user experience.
- Incorporated AWS S3 for a seamless user experience (UX) of real-time communications of commenting and photo-sharing.
- Enhanced the application's efficiency, dynamism, and maintainability by 30% utilizing React Router DOM loaders and actions as a streamlined alternative to Redux.
- Utilized: React, Docker, Python, Flask, SQLAlchemy, AWS S3, PostgreSQL, Figma

Ravenhood[Live](#) | [Repo](#)

- Coordinated project utilizing Kanban methodology within a team to effectively organize tasks, track progress, and ensure timely completion of all required features, resulting in a fully functional and optimized web application.
- Leveraged the yfinance API to import and seed real-time stock data allowing the construction of the entire site for user accounts.
- Developed a full-stack app with React/Redux frontend and Flask/SQLAlchemy backend for efficient data synchronization.
- Utilized: React/Redux, Python, Flask, SQLAlchemy, AWS S3, yfinance API, PostgreSQL

Oh, The Places We Will Grow![Live](#) | [Repo](#)

- Implemented custom user authentication utilizing BCrypt Hashing Function on the backend and React Auth Routes on the front end to prevent storing plain text passwords and restrict access to user-specific data and features.
- Initiated RESTful APIs to facilitate seamless communication between the client side and server side of the application.
- Designed a custom error page using React Router to render server error messages and status codes dynamically.
- Utilized: React/Redux, Express, Sequelize, AWS S3, SQLite, PostgreSQL, Postman

EDUCATION**App Academy, Software Engineering***Online*

- Graduated from a highly competitive program with a 3% acceptance rate, completing 1100+ hours of intensive coding.
- Mastered full-stack web development technologies, best practices (TDD and CI/CD), and scalable architecture design.

The University of Georgia, Bachelor of Science in Chemistry - Minor: Spanish*Athens, GA***AWARDS****Impact Award, Clarke County School District***May 2017***PROFESSIONAL CERTIFICATIONS****Rust Fundamentals, Duke University, Credential ID: XJE6IJ1X98Y6***February 2025***Software Engineer, App Academy***September 2024***HTML and CSS in Depth, Meta, Credential ID: 6JENLZAPAHN6***November 2023***Version Control, Meta, Credential ID: MKR5PBQ97QNY***October 2023***Programming with JavaScript, Meta, Credential ID: 4CWFHCGDX4X6***October 2023***Introduction to Generative AI, Google, Credential ID: NGSL3CKYGGJAT***October 2023***COMMUNITY INVOLVEMENT****Google x Career Karma's Black Genius Academy: A Tech Equity Collective, Member***October 2023-Current***Men Cry Too, Founder***July 2023-Current***UGA Alumni Association, Member***May 2017-Current***American Chemical Society, Member***August 2015-Current***Colgate-Palmolive Social Committee, Member***July 2018-August 2019***America Reads America Counts, Tutor***August 2016-May 2017***Black Male Leadership Society, Member***August 2014-May 2017***Tucker Habitat for Humanity, Member***August 2012-May 2017*