PETER TESSIER

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EDUCATION

University of Virginia, School of Engineering and Applied Science, Charlottesville, VA *May 2025*

- BS in Computer Science and BA in Mathematics, GPA 3.84
- Relevant Coursework: Data Structures and Algorithms | Machine Learning | Databases | Compilers | Cybersecurity | Software Development | Discrete Math and Theory | Computer Systems and Organization

UVA in Valencia, Semester abroad, Valencia, Spain *Fall 2022*

- Reached B2 (upper-intermediate) level of Spanish during a semester of 15+ European expeditions

SKILLS

- Proficient in: Python, RESTful API, CI/CD, TypeScript/JavaScript, SQL, Bash, Java, C, Docker, Playwright, Postgres
- Experience with: Kubernetes, Keycloak, RabbitMQ, HTML/CSS, Amazon AWS, Google Cloud

EXPERIENCE

Backend Software Engineer, *Noblis* *June 2025 – Present*

- Drive feature development, bu -fixes, and enhancements for a multi-year federal data aggregation platform with hundreds of FastAPI endpoints, over 40 Vue pages, and continuously evolving requirements
- Own a Playwright-based end-to-end test suite, contribute to GitLab CI pipelines, and automate testing for over 7 microservices, achieving 90%+ backend code coverage
- Optimized 10+ high-traffic API response times by up to 98% through advanced SQL tuning and custom performance benchmarking, reducing response times from seconds to milliseconds
- Architected and implemented a security-critical clearance-based data censoring system designed for efficiency and extensibility across 10+ database entities
- Developed a production-grade template underpinning over 4 data analysis services featuring a library for asynchronous RabbitMQ messaging
- Integrated Keycloak X.509 certificate-based authentication with LDAP via the OpenID Connect protocol

Software Developer in Test/Quality Assurance Engineer, *Amazon* *June 2024 – August 2024*

- Developed and automated testing for 6 reusable Python scripts to expose kernel functionality, such as persistent storage management and LED control, reducing redundant code across multiple devices
- Engineered a Jenkins CI/CD pipeline to automate the download, flashing, and testing of components on devices, reducing manual deployment errors and increasing deployment speed about 20-fold.
- Created a general-purpose command-line tool for local Jenkins pipeline development, featuring colored debug messages, parameter editing, and stage pausing, resulting in a 25% decrease in pipeline development time.
- Designed, implemented, and exposed command-line functionality for a caching mechanism – which sped downloads by up to 30 times – and raspberry pi GPIO control, revising the design to balance usability and power

ML Data Analyst, *Machine Learning for Virginia* *August 2023 – December 2023*

- Classified 130 Virginia counties with 100% accuracy using t-SNE and UMAP dimensionality reduction; K-Means, DBSCAN, and GMM clustering; and a TensorFlow-powered Deep Neural Net for 12-week competition
- Merged and cleaned 2 government datasets on food bank and food insecurity by hand-inspecting 100+ features
- Presented results in 6-page conference-styled paper and 7-minute video, including 7 references and graphics generated with Matplotlib, Plotly, and Seaborn

Test Automation Intern, *ScienceLogic* *June 2022 – August 2022*

- Automated 4 manual test sets covering Electronic Key Management System (EKMS) initialization, restart-ability, logging, and token rotation, reaching 133% of company-requested goal
- Developed, tested, and standardized 800+ lines of Python code and 1100+ lines of Gherkin code
- Discovered, investigated, and detailed 3 bug tickets while running 11 Jira test sets as a Quality Assurance engineer