PETER TESSIER

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EDUCATION

University of Virginia, School of Engineering and Applied Science, Charlottesville, VA   *Expected May 2025*
- BS in Computer Science and BA in Mathematics, GPA 3.85
- Relevant Coursework: Machine Learning | Databases | Compilers | Cybersecurity | Software Development | Data Structures and Algorithms | 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, Java, C, Linux, git, Latex, Matlab, Excel, Scikit Learn, Keras, Django, Plotly Dash, Agile
- Experience with: Bash, JavaScript, Assembly, SQL, HTML/CSS, Amazon AWS, Google Cloud Console

RELEVANT EXPERIENCE

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

Full-Stack Web App Developer, *Advanced Software Development*   *August 2023 – December 2023*
- Designed, implemented, and tested Django/Python-built web application for hosting user-created and searchable-via-filter local events deployed on Heroku in team of 5 over 12 weeks
- Integrated Google Maps and Google OAuth API via Google Cloud Console with embedded map and user privileges
- Solicited and validated customer requirements by surveying and interviewing 35+ stakeholders, then having 5 users complete personally designed 28-step Beta test

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

LEADERSHIP AND ADDITIONAL EXPERIENCE

- **Music Director:** Led twice-a-week 3-hour rehearsals, twice-a-month gigs, and semesterly concert in 14-member college a cappella group, resulting in doubled membership and heightened audience acclaim during 2023
- **Group Theory Researcher:** Performed 12-week research comparing effectiveness of 3 group theoretical tools for musical chord analysis with personal Math graduate student, culminating in 20-minute presentation
- **P2L Peer Coach:** Taught 5+ Calculus II students for twice-a-week hour-long sessions during Spring 2022. Hired by university and planned lessons with professor