Nicholas Facciola

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Education

- **Master of Science in Computer Science,** *Grand Canyon University*   Aug 2023 - Feb 2025
- **Bachelor of Science in Computer Science,** Arizona *State University*   Aug 2017 - May 2022

Professional Experience

Karl Storz | *Software Engineer in Test*   Oct 2025 – Present

- Built **C#/.NET automated test frameworks** for endoscopic imaging software, implementing reusable fixtures, test utilities, and hardware-integration test flows to **reduce manual verification** time.
- Designed and executed manual regression cycles across multiple software releases, identifying critical defects prior to customer delivery.
- Logged detailed bug reports in Jira and collaborated directly with developers and product owners to triage, reproduce, and isolate defects in imaging pipelines and UI workflows.
- Reviewed and approved pull requests, ensuring test coverage, coding standards, and regression reliability across QA-owned components.
- Contributed to test strategy discussions, helping define test plans, acceptance criteria, and risk-based test prioritization for new device features.

Intel Corporation | *Product Development Engineer*   May 2022 – Aug 2025

- Designed **Azure-hosted full-stack dashboards** (Flask, React, SQL, REST APIs) to track product health and performance; containerized with **Docker** for deployment to Azure.
- Developed and maintained **automated CI/CD pipelines** (GitHub Actions) supporting **100+ pull requests**, enabling regression testing and stable releases.
- Built and optimized **SQL queries, stored procedures, and database pipelines** for thermal module data, ensuring compliance with test thresholds.
- Implemented **Python and C# test modules** for hardware and firmware validation, directly supporting **Panther Lake, Bartlett Lake & Meteor Lake** CPU launches.
- Led modifications of **cold-boot workflows** for Raptor Lake Automotive by streamlining boot scripts in Python SV, then converting CSV and XML data into SPI test vectors.
- Created **automated management dashboards (HTML/CSS/JS + Python integrations)** embedding Power BI visualizations, CAPA quality trackers, HDMX tester status, Linux disk storage, and VM utilization cutting weekly reporting overhead for stakeholders by **33% per quarter**.
- Authored **30+ pages of technical documentation** and trained engineers on GitHub Copilot and AI coding tools, improving execution efficiency by **25%**.
- Collaborated across Agile/Scrum teams, participating in three weekly standups and code reviews to align deliverables.

Arizona State University | *Software Developer (Research Assistant)*   Aug 2020 – May 2022

- Built **C# Unity applications** deployed to WebGL/Android, collecting usage data from 200+ students.
- Automated ETL workflows with **Python and Google Forms integrations,** boosting ingestion efficiency by **60%.**
- Optimized codebases and pipelines, cutting runtime errors by **35%** and improving system reliability.
- Partnered with researchers to design experiments and contribute to **2** published studies.

Projects

OpenEMR Patient Portal Test Automation (Portfolio Project)   Aug 2025 - Sep 2025
- https://github.com/nfacciola/PatientPortalTestAutomation
- Developed a **Selenium + PyTest automation framework** for the OpenEMR Patient Portal using the Page Object Model (POM), covering authentication, profile integrity, appointments, messaging, and HIPAA security scenarios
- Implemented **HTML reporting with screenshots**, environment-driven configuration, headless browser support, and PyTest markers for smoke, regression, and security test runs
- Integrated a **GitHub Actions CI/CD pipeline** to run cross-browser tests on each push/PR, ensuring reliability and maintainability of the test suite

Technical Skills

- **Languages:** C#, Python, C++, Java, JavaScript, SQL, Bash, PowerShell, HTML/CSS
- **Frameworks & Tools:** .NET Core, React, Flask, Docker, Git/GitHub, Azure DevOps, REST APIs, Selenium, Playwright
- **Databases:** SQL Server, MySQL, query optimization
- **Practices:** Agile/Scrum, CI/CD pipelines, Unit/Regression Testing, API Development, Secure Coding Standards
- **Office Skills:** Excel, Word, and PowerPoint, Visio, Lucidchart