

Tyler Broгна

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Education

Rochester Institute of Technology • 2014
Bachelor of Science • Game Design and Development
Minor • Digital Literature

Work Experience

Accusoft • Tampa, FL

Software Engineer III • January 2018 - July 2023

- Planned and implemented a system in Java that lays out and renders all contents of Microsoft Excel files, resulting in a tool that is faster, more stable, utilizes less memory, and produces more accurate results
- Implemented a tool in Java for content layout and rendering of Microsoft DrawingML Charts, utilizing various modules for the user to select such as legends, variable axis, plots and series combinations
- Upgraded a major product to be a multithreaded API, featuring better error reporting, increased speed, and additional API endpoints based on extensive user feedback
- Created and maintained consistent, fast and extensible XML parsing libraries to handle schemas, templates, as well as regular XML, both DOM and SAX parsers
- Built several custom formatting libraries in C# and Java and based on the OOXML specification, to support a major document processing product, including number, date, time, currency, and locales
- Guided the team by writing requirements for features and bugs, updating leads and stakeholders on progress, and collaborated with team members using Jira
- Presented our work and results, showcasing tasks completed, tools used, systems built, and value added
- Oversaw quality and security of software by reading, testing, and refining other team member's work

Conduent Legal and Compliance • Albany, NY

Developer • July 2015 - June 2017

- Wrote PL/SQL scripts, MySQL procedures and functions, and Oracle SQL automations to enhance internal business applications with data scrubbing, new features, and QA automation
- Architected and developed front- and back-end web applications to organize data and improve decision making for engineers and managers using PHP and JavaScript
- Designed and programmed an automated web testing platform using Selenium and Excel, compiling results for data-driven engineering processes improvement
- Aligned project requirements with overseas engineers and managers to plan and complete projects

Epic Medical Systems • Verona, WI

Quality Assurance • July 2014 - Jan 2015

- Tested and reported bugs on an internal ticketing system for Epic products for quality assurance
- Educated and mentored medical personnel on how to install, use, and support Epic Products

JADAK • Syracuse, NY

Intern • Jan 2014 - Apr 2014

- Wrote C code to fix bugs on embedded software for barcode scanning devices
- Created automated testing software that interfaced with barcode scanning hardware to test efficacy

Optionsoft Technologies • Clifton Park, NY

Intern • May 2013 - Aug 2013

- Wrote web test automation software with Java and Selenium
- Wrote desktop automation software with C# and Nunit

Projects

Game Jams

- [Windmill Slam](#): As a team of three, we created a rogue-like deck building game with Godot 4. I oversaw card effect implementation and programming, UI elements, and game board effects
- [Toom World](#): As a team of four, we created a 3D, first person shooter metroidvania game with Godot 3. I oversaw enemy programming, character controller, level design, and assisted with art assets

Python Web Scraper

- Created a desktop application using Python to search, download and archive information from the GameFAQs website
- Features included: GUI with tkinter, progress tracking and saving, scraped data validation

Web Development

- Used AWS, Oracle Cloud to design scalable, high-uptime web applications
- Programmed modern web build pipeline using Docker, Vite, Github Actions
- Programmed backend using Docker, Node.js, express.js, PostgreSQL
- Designed frontend web applications using Preact, Bootstrap, Javascript
- Worked with the Google Cloud Console to create scripts in multiple languages for business application and automation
- Modified WordPress applications

Other

- Used LaTeX document creation tools to write manuals for tabletop games

Interests

Martial Artist, Video Game Collecting and Preservation, Downhill Skiing, Electronics repair and tinkering, Magic: The Gathering Cube Design