

Joseph Michael Cauley

912-381-5037 | jmcauley04@gmail.com

Site & Portfolio: <https://jmcauley-resume.com/>

SUMMARY

5+ years of experience creating solutions with programming and automation with an emphasis on the .NET tech stack. Dependable and organized with a passion to learn and to be challenged. Trained in mathematics, data analytics, and problem-solving methodology, I create innovative solutions that solve problems and exceed expectations.

I currently work in the aerospace manufacturing industry at PCC Airfoils as the IT Supervisor (Acting Manager) but my passion is development. Aerospace took a hard hit during the economic decline brought on by COVID and to maximize my value, I took on this role. My working experience spans the full Microsoft technology stack, Allen Bradley tools for automation in manufacturing, and Inductive Automation's Ignition. Relative to my peers, I feel that I spend more time planning solution architecture because a good design pays for itself by significantly reducing future costs.

KEY SKILLS

- **Backend:** C#, Python, T-SQL, MSTest, EF6/Core
- **Frontend:** Blazor, HTML, CSS, Bootstrap, WPF
- **Database Design:** Relational (MS-SQL)
- **DevOps:** DevOps, CI/CD Pipelines, Unit Tests
- **Source Control:** Git, TFVC
- **Data:** Power BI, SSRS, SAS

EXAMPLES OF WORK EXPERIENCE

Website Portfolio – <https://jmcauley-resume.com>

The site is a single page app that displays some details about myself, my resume, and my portfolio. This is mostly a front-end using Blazor (client-side), C#, bootstrap, HTML, and CSS. The website is hosted on Azure DevOps and utilizes a continuous deployment pipeline to automate the deployment process and is source controlled on GitHub.

The Grocery List

This application allows a user to create a two-week meal plan and to have a grocery list automatically generated from the plan and ingredient details in the recipe. It is built as a Blazor (server) application using C#, bootstrap, T-SQL (hosted on GearHost), bootstrap, HTML, and CSS. The data tables are designed in the third normal form to eliminate data inconsistencies and to reduce duplication. The object models are scaffolded from the database using Entity Framework 6 and a database-first approach. The source code is on Azure DevOps.

Airfoils Quality Control System (AQCS) Overhaul

AQCS is the heart of the information system at our local facility. The system was built almost entirely on WinForms and C# with MS-SQL for data storage. Over the many years that it has been in production, the system has transformed into an amalgamation of over 400 applications with a lot of redundant programs, inconsistencies, and difficult to track bugs. I have designed a new architecture to reduce complexity and maximize code re-use by condensing the number of applications to only six web applications using an on-prem hosted Azure DevOps server for source control. I have already created the automated build, test, and release pipelines. These applications are being built using Blazor (server), C#, HTML, CSS, and T-SQL and using an Agile project management methodology, we are adding features and deploying them at a rapid rate to assure that the value of our efforts are made available as early as possible.

Experimentation Program

This program started because I found myself continually making new projects to test ideas, so I decided to keep a single project to share what I've learned with teammates and to serve as a reminder of how to re-create the result. The application implements various design patterns such as the command pattern, tackles the challenge of passing updates to the UI thread from an async thread, shows how to perform unit testing with MSTest, and more. The application is built using WinForms as a frontend.

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EMPLOYEMENT HISTORY

IT Supervisor (Acting Manager)

PCC Airfoils, LLC

Jan 2016 – Present

- Led a small team focused on local plant development, systems administration, hardware support, and security.
- Supported corporate initiatives in a local capacity.
- Developed and maintained systems software and applications to improve productivity and increase automation.

Networking Technician

Valdosta State University

Jan 2010 – Dec 2015

- Assisted with network related help requests.
- Installed access points, configured switches, and troubleshooted general issues.

EDUCATION

Western Governor's University

2018 – 2019

M.S. Data Analytics

- Experience with R, SAS, python, tableau, and statistics.
- Capstone: developed random forest classifier that identified a high-risk sub-process initiating an investigation to reduce annual cost by \$197,750 at a manufacturing facility.

Valdosta State University

2010 – 2013

B.S. Applied Mathematics

- Employed as networking assistant / IT technician and math tutor.
- Acted as president of local chapter of Pi Mu Epsilon.
- Awarded a mathematical achievement award in 2012.