

EMPLOYMENT

Software Developer	Hamilton Manufacturing Corp.	August 2022 – Present
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- Refactored legacy MVC admin platform to ASP.NET Core Web API and created APIs for a new React-based e-commerce PWA designed to replace outdated native apps.
- Improved report performance and server response times by up to 85% through optimized queries and reduced redundancies.
- Built an interceptor using Castle DynamicProxy for logging method parameters and arguments during unhandled exceptions, expediting bug fixes.
- Developed a messaging service using Azure queue storage and trigger functions to decouple email, SMS, and push notification delivery from core APIs.

Senior Database Engineer	Pitcher List	December 2019 – Present
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- Originally started on the Data Science team, developing new baseball stats like *weighted Earned Strikes (wES)* and *Simple Pitching Estimation index (speX)* using Python machine learning libraries like scikit-learn and SciPy.
- Transitioned into Flask API developer role that involved fixing data-related bugs, adding query parameters to existing endpoints to allow more data shaping, and ingesting new stats from our PostgreSQL database.
- Eventually took on the role of Senior Database Engineer to oversee the migration of our database from ElephantSQL to Amazon RDS, as well as to assist a new React development team in creating and maintaining materialized views to be used in their APIs.

SKILLS

- **Languages:** C#, SQL, Python, JavaScript, HTML/CSS
- **Technologies:** ASP.NET Core, Entity Framework Core, SQL Server, Azure, IIS, React, AWS (S3, RDS), PostgreSQL, Heroku, Git, Flask, Jinja, FastAPI

SOFTWARE PROJECTS

Spot The Plane (spottheplane.net)

- Aircraft trivia game built using FastAPI, React, and PostgreSQL.
- HTTP requests are sent from the server to the Planespotters API to retrieve the most recent pictures of the provided aircraft registration numbers.

Tracey Nicholas Art (traceynicholas.com)

- E-commerce website built with Flask and Jinja.
- Painting details are stored in a PostgreSQL database with a unique identifier that is used to retrieve images from an AWS S3 bucket.
- Purchases are handled through the PayPal Python SDK.
- Built a custom CRUD page for site administrators to manage product listings.

EDUCATION

Bowling Green, OH	Bowling Green State University	Sept 2014 – May 2016
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- **M.M.** in Music Composition

Ypsilanti, MI	Eastern Michigan University	Sept 2007 – Dec 2013
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- **B.Sc.** in Music (Cum Laude)

INTERESTS

- Classical music; baseball; football; data science; woodworking; arthouse cinema; epistemology; aviation