

## EMPLOYMENT

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**.NET Developer** **Hamilton Manufacturing Corp.** **August 2022 – Present**

- Refactored legacy MVC admin portal to ASP.NET Core Web API, and created APIs for a new React-based e-commerce PWA designed to replace outdated native apps.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**

- 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 and spent most of that time fixing data-related bugs and pulling in new stats added to 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 materialized views to be used in their APIs.

## SKILLS

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- **Languages:** C#, SQL, Python, JavaScript, HTML/CSS
- **Technologies:** ASP.NET Core, Entity Framework Core, Azure, Heroku, AWS, Git

## SOFTWARE PROJECTS

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### Spot The Plane ([spottheplane.net](https://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](https://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

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**Bowling Green, OH** **Bowling Green State University** **Sept 2014 – May 2016**

- **M.M.** in Composition

**Ypsilanti, MI** **Eastern Michigan University** **Sept 2007 – Dec 2013**

- **B.Sc.** in Music (Cum Laude)

## INTERESTS

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