

## EMPLOYMENT

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<b>Backend Developer II</b>	<b>Porch Software</b>	<b>January 2025 – Present</b>
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- Implemented OCR to extract data from PDF illustrations for new life insurance products.
- Enhanced SQL Server stored procedures to incorporate new data points in reports.
- Resolved mapping bugs in Acord 103 XML to C# classes.

<b>Software Developer</b>	<b>Hamilton Manufacturing Corp.</b>	<b>August 2022 – January 2025</b>
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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MVC admin platform to ASP.NET Core Web API and created APIs for a new React-based e-commerce PWA designed to replace outdated native apps.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 with Castle DynamicProxy to globally log method parameters during unhandled exceptions, eliminating redundant try/catch logging throughout the codebase and expediting bug fixes.
- Developed a messaging microservice using Azure queue storage and trigger functions to decouple email, SMS, and push notification delivery from core APIs.
- Implemented reCAPTCHA and rate limiting to prevent abuse of credit card tokenization and user account creation API endpoints.

<b>Senior Database Engineer</b>	<b>Pitcher List</b>	<b>December 2019 – Present</b>
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- Migrated staging and production PostgreSQL databases from ElephantSQL to Amazon RDS.
- Created and maintained large materialized views for consumption by Pitcher List and third-party React APIs.
- Developed new baseball statistics like *weighted Earned Strikes (wES)* and *Simple Pitching Estimation index (speX)* using Python machine learning libraries like scikit-learn and SciPy.
- Fixed data-related bugs, enhanced Flask API endpoints with query parameters for flexible data shaping, and integrated new database stats.

## SKILLS

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

## SOFTWARE PROJECTS

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

- Aircraft trivia game built using FastAPI, React, PostgreSQL, and the *planespotters.net* photo API.

**Tracey Nicholas Art** ([traceynicholas.com](https://traceynicholas.com))

- Developed an e-commerce site using Flask, Jinja, and PostgreSQL, integrating AWS S3 for image retrieval.
- Implemented PayPal SDK for purchases and built a custom CRUD admin dashboard.

## EDUCATION

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

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

## INTERESTS

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