

SKILLS

Languages C# | Python | Javascript/Typescript | Java | SQL | wrote first BASIC application at age 10
Technologies ASP.NET Core | EF Core | Angular | Git | Azure Synapse | SQL Server | PowerBI | Cordova | Spring

EXPERIENCE

Superior Court of California, County of Santa Clara

July 2023 - present

Senior Software Engineer

San Jose, CA

- **Saved clerks up to 20 hours per week** on manual hearing scheduling by architecting (n-tier) and building (C#, ASP.NET Core Web API, Angular, SQL Server, EF Core) the Santa Clara County Superior Court Reservations System to allow case parties and attorneys to reserve hearings online. Available at reservations.scscourt.org.
 - Served as solution architect, project manager, business analyst, and full-stack developer.
 - Gathered requirements from clerks, developed project plan, and engaged in iterative development process.
 - Developed configurable system designed for changes in business rules and facilitated integration with the Court's Case Management System via SOAP and with other internal services via REST endpoints.
 - During feedback sessions with attorneys, we were told multiple times that the developed system was significantly easier to use than similar systems in use at other Superior Courts.
- **Architected (n-tier) authorization solution for over 10 internal applications** to allow self-service access management. Developed (C#, ASP.NET Core Web API, SQL Server, EF Core) case validation service for use by the Reservations System and other applications.

Ohio Department of Transportation

Aug 2014 - present

Technical Consultant (2023-present) | Data Solutions Manager (2022-2023) | Program Administrator (2019-2022) | College Intern (2014-2016)
 Columbus, OH

- **Replaced disconnected legacy systems requiring 5 hours per week manual data transfer for over 200 users statewide** by architecting (n-tier) and building (C#, ASP.NET Core Web API, Angular, SQL Server, EF Core) the Work Zone Management System to collect work zone data and integrate with external partners (Google, Apple, Waze). Aligned system with federal data structure and integrated with ODOT geospatial data sources. Data available on ohgo.com.
 - Served as solution architect, technical lead, business program manager, and full stack developer. **Supervised two other developers on my development team.** Ensured ODOT's VCS (Git) and SDLC practices followed.
 - Evangelized project at all levels of agency from executive management to highway maintenance workers.
 - Gathered requirements from stakeholders with diverse needs. Held routine feedback sessions to identify issues and gauge project traction.
- **Saved over \$280K in contract staff expenses and reduced KPI reporting lead time by up to 83%** by taking over data warehousing initiative and migrating performance metric workflows from manual, Excel-based processes to high-performance Python and Azure Synapse based processes.
 - Served as program manager, technical lead, and developer. **Mentored less technical staff in creating programs with Python.**
 - **Reduced time-to-availability from 6 weeks to 1 week** for Traffic Operations Assessment Systems Tool data.
 - **Reduced time-to-availability from 1 month to 1 week** for Snow and Ice Performance Evaluator.
 - **Enabled reduction of 3 staff augmentation positions focused on the manual download and processing of KPI data and 1 contracted data architect position.**
 - Engaged heavily with non-technical staff to understand requirements and ensure accuracy of solutions.
- **Developed 2 mobile applications** for the Ohio LTAP office using Cordova and Ionic Framework.
- **Enhanced public access to state data** by developing PowerBI dashboards.
- **Presented at over 10 conferences** to technical and non-technical audiences on our innovations. [Example: slides 30 to 53 of this presentation.](#)

Ohio State University

Sep 2011 - present

Technical Consultant (2015-present) | Admissions Specialist (2018-2019) | Program Assistant (2016-2018) | Student Assistant (2011-2016)
 Columbus, OH

- **Saved professional staff over 10 hours weekly** spent synchronizing Excel sheets for Tutoring and Clinical Programs by developing a Microsoft Access database with extensive VBA customization to store parent, tutor, and student data. Continually developed and improved the system over 3 major releases.
- **Published in 2 academic journals** through supporting grant-funded academic research projects focused on energy policy and resiliency. **Developed multiple scraping and data integration applications (Python, Java, Spring)** to support the collection and analysis of data.

EDUCATION

Master of Public Administration

Aug 2016 - May 2019

Ohio State University (fully funded by University)

Columbus, OH

Bachelor of Science, Economics & Political Science, statistics minor

Sep 2011 - May 2016

Ohio State University (full cost of attendance scholarship)

Columbus, OH