

David O. Southwood Senior Full-Stack Software Engineer

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SUMMARY

Senior Full-Stack Software Engineer with 13+ years of experience modernizing legacy applications and building enterprise web, API, and data-processing systems. Experienced in migrating legacy frontends to React and TypeScript, developing C#/.NET applications and REST APIs, designing SQL Server solutions, and supporting business-critical production systems. Strong background in React, TypeScript, Angular, Vue.js, C#/.NET, Azure, SQL Server, real-time applications, authentication, and CI/CD.

WORK EXPERIENCE

Software Engineer | TradeZero

10/2024 - 06/2026, New York

- Modernized a legacy frontend application by migrating 20+ pages from Vue.js to React and TypeScript, establishing reusable components, shared application patterns, and a more maintainable frontend architecture.
- Designed and delivered a widget-based operational dashboard with 6 widgets using FlexLayout and AG Grid to support complex, data-intensive workflows.
- Built frontend architecture around reusable React components, custom hooks, shared state management, routing, API service layers, and common utilities while integrating REST APIs and SignalR real-time data streams for live operational workflows.

Full-Stack Software Engineer | InCharge Education Foundation

08/2022 - 12/2023, Orlando

- Converted legacy ActiveReports to standardized SSRS reports, improving consistency, maintainability, and long-term supportability for reporting deliverables.
- Facilitated the migration from Team Foundation Server (TFS) to Azure DevOps, including repository organization, CI/CD pipeline setup, cloud transition planning, and pull-request workflow improvements.

Full-Stack Software Engineer | R&R Express

12/2020 - 05/2022, Pittsburgh

- Built custom backend data-processing applications for ingesting, transforming, validating, and loading CSV data into SQL Server databases for multiple business units.
- Developed Azure Functions using Optical Character Recognition (OCR) to extract image content and combine it with SQL data into structured database records.
- Implemented location-based timezone resolution using timezone polygon data, SQL Server Geography types, and geospatial lookup logic to determine the correct timezone from geographic coordinates.

Full-Stack Software Engineer | UPMC

02/2018 - 12/2020, Downtown Pittsburgh

- Architected a custom document-management system integrating Azure Blob Storage, microservices, and an Angular frontend, with comprehensive unit testing and a custom encryption implementation using Azure Key Vault for secure document storage and retrieval.
- Built and maintained enterprise-grade applications using Angular 6-9, TypeScript, C#, .NET Framework, .NET Core 3.0, REST APIs, and Azure cloud services.
- Partnered with business stakeholders, Quality Assurance (QA) teams, and technical personnel to deliver secure, scalable, and maintainable features for critical healthcare applications.

Front-End Web Developer | InventHelp

03/2013 - 12/2017, Downtown Pittsburgh

- Maintained more than five company websites, providing support for frontend updates, backend operations, middle-tier adjustments, production issue resolution, and marketing-driven requests.
- Transformed legacy websites into responsive designs using HTML5, CSS3, Bootstrap, jQuery, C#, and the .NET Framework.

EDUCATION

B.S. - Web Design and Interactive Media | The Art Institute of Pittsburgh

2016 - 2018, Pittsburgh, PA

A.S. - Interactive Media Design | The Art Institute of Pittsburgh

2010 - 2012, Pittsburgh, PA

SKILLS

Languages: C#, JavaScript, TypeScript, SQL

Frontend: React, Angular, Vue.js, HTML5, CSS3, Bootstrap, jQuery, AG Grid, FlexLayout, responsive web design, reusable UI components

Backend: .NET, ASP.NET Core, .NET Framework, REST APIs, Node.js, SignalR, API integration

Data: SQL Server, PostgreSQL, SQL Server Geography, stored procedures, data processing

Cloud & DevOps: Azure, Azure Functions, Azure DevOps, CI/CD, Docker, Git, TFS

Security & Testing: Authentication, authorization, MFA, Azure Key Vault, unit testing, automated testing

Tools & Reporting: Visual Studio, VS Code, SSRS, WordPress