



Eric Sclafani

SOFTWARE DEVELOPER

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RESUME WORK IN PROGRESS

Experience

Junior .NET Developer

Brooklyn, NY

KINGS COUNTY DISTRICT ATTORNEY'S OFFICE

April 2024 - Present

- Within first month of employment, built maintenance tool that enables non-technical Legal staff to perform CRUD operations on SQL Server lookup table. This table stores crucial data about different categories and subcategories legal documents can be classified as. Legal trials typically require many documents, and the disorganization of them can negatively impact a trial, of which this tool mitigates. This application uses ASP.NET Core Web API to handle HTTP requests, Angular for client-side interactivity, and Material UI for styled web components to provide for a user-friendly experience
- Developed full-stack web application for Alternative Programs Bureau to manage data about defendants enrolled in court-mandated drug treatment programs. This bureau aims at diverting drug-addicted defendants to treatment programs to seek help rather than face incarceration. Stored data is normalized across many tables in SQL Server. Initially built with .NET Framework MVC and jQuery, re-engineered using ASP.NET Core Web API for server logic, Angular for data-driven reactive forms, and Material UI for crafting an intuitive interface
- Wrote SQL Server stored procedures for numerous data-driven applications...
- Integrated newer applications into large existing codebase spread across numerous repositories in Microsoft Azure DevOps.
- Worked with Legal staff to translate their application requirements into fully functional software tools...
- Provided fast and efficient tech support for application users...
- Collaborated on a team of ~10 developers...

Research Assistant

Stony Brook, NY

U.S. GOVERNMENT RESEARCH PROGRAM: IARPA HIATUS

October 2022 - August 2023

- Worked on a federal research project funded by the Intelligence Advanced Research Projects Activity (IARPA) called HIATUS, which focuses on authorship attribution, the task of automatically identifying the author of a document
- Developed Gram2Vec, a Python package utilizing spaCy and Pandas to convert text into vectors based on writing style. Differs from other embedding algorithms like Word2Vec in that each vector position corresponds to a concrete feature pertaining to grammar usage. This makes the vectors interpretable, a property that traditional word vectors often lack
- Performed authorship attribution experiments using Gram2Vec with testing code and data provided by IARPA
- Collaborated with team members to compile monthly progress reports

Skills

Frontend Angular, VueJS, TypeScript, JavaScript, HTML, jQuery, RxJS

UI CSS, SCSS, Bootstrap, Angular Material

Backend ASP.NET Core, .NET, MVC, Python

Database SQL Server, T-SQL, SQLite

Tools Git, Visual Studio, Linux

Other Pandas, Scikit-Learn, NumPy, spaCy, Plotly, Matplotlib

Education

M.A. Computational Linguistics

Stony Brook, NY

STONY BROOK UNIVERSITY

August 2021 - May 2023

B.A. Linguistics

Stony Brook, NY

STONY BROOK UNIVERSITY

August 2019 - May 2021