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 web-based maintenance tool that enables non-technical Legal staff to perform CRUD operations on SQL Server lookup table. This table stores crucial data about different (sub)categories that legal documents can be classified as. Legal trials 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 a user-friendly experience.

- Developed web application for Alternative Programs Bureau Drug Treatment Unit to manage data about defendants enrolled in court-mandated drug treatment programs. This unit aims to divert 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 application-specific SQL Server stored procedures to facilitate data transfer between database and applications....

- Worked with Legal staff to translate their business requirements into full-stack applications tailored to their specific needs....

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 attibutions experiments with Gram2Vec using custom built K-Nearest Neighbors testing algorithm, as well as an evaluation suite provided by IARPA.

- Collaborated with team members to compile monthly progress reports.

Skills _____

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