Evan Leon

P. 860-712-5366 | evan.leon.j@gmail.com | LinkedIn | GitHub | Portfolio

PROFESSIONAL EXPERIENCE

Northeastern University | August 2022 - Present

Lead Web Developer for Media Cloud Project

- Architected and implemented a robust search and analysis platform for Media Cloud, enabling researchers to query and visualize billions of news stories across thousands of sources.
- Led the redevelopment of the Search and Directory applications, modernizing user interfaces and backend performance to meet evolving research needs.
- Integrated Elasticsearch to power instant search queries and analysis, reducing average search response times from over one minute to under one second.
- Scaled Media Cloud web tools to support over 27,600 users, with roughly 1,000 monthly active researchers and 167,000+ monthly transactions, maintaining a 99.8% crash-free session rate and average search response time of less than one second.
- Built search functionality allowing real-time querying and analysis across an index of 1+ billion news articles..
- Developed a lightweight Svelte application, Media Cloud Vitals, to provide live status updates and performance indicators to users of the Media Cloud web tools.
- Managed and mentored a team of student developers, fostering a collaborative environment for creating and delivering substantial feature expansions and code contributions to the Media Cloud platform.

Media Ecosystems Analysis Group | March 2023 - Present

Web Developer

- Maintained and enhanced MEAG websites (mediaecosystems.org and mediacloud.org) using Webflow, updating menus, text, images, and layouts to align with evolving research and communication needs.
- Collaborated with research and management teams to define project requirements and deliver website updates ahead of schedule.

App Academy | September 2021 - March 2022

Software Engineer and Instructor

- Lectured weekly on topics ranging the full stack, including CSS, Abstract Data Types, and testing in Ruby and Javascript.
- Hosted office hours daily to address students' technical and conceptual questions .
- Mentored students throughout the program, leading daily standups to review the day's materials and answer remaining student questions.
- Oversaw more than 20 students, providing project management support and guidance in helping to debug and strategize.

SKILLS

Frontend: JavaScript, React, Redux, Redux Toolkit, Svelte, HTML, CSS, SASS, Bootstrap, jQuery, D3.js, Webpack, MUI

Backend: Python, Django, Django Rest Framework, Node.js, Express.js, Ruby, Ruby on Rails

Databases: PostgreSQL, SQLite3, MongoDB, Mongoose, SQL

DevOps & Deployment: Git, Heroku, Dokku, AWS S3

PROJECTS

Media Cloud Web Tools (JavaScript, React, Redux Toolkit, Django, Django Rest Framework, PostgreSQL, Elasticsearch, Dokku, GitHub, SCSS, Bootstrap CSS, MUI): *A full stack platform supporting researchers in media analysis.*

Live Site | GitHub

- **Directory application:** Using Django Rest Framework backend with a React frontend, created a directory that features multiple CRUD interfaces for managing media sources, collections, feeds, and their relationships.
- **Search application:** Built a search application that enables researchers to create queries against the Media Cloud Elasticsearch index through a streamlined "Simple Search" tool. Includes a Media Picker modal for selecting specific sources or collections, and allows for exporting results such as data summaries or URLs.
- **Performance:** Supports over 27,600 users with 167,000+ monthly transactions, maintaining a 99.8% crash-free session rate and average search response time of less than one second.

Media Cloud Vitals (JavaScript, Svelte, CSS): *A lightweight Svelte application built to display internal vitals about the Media Cloud ecosystem.*
Live Site | GitHub

- **Responsive dashboard:** Developed a responsive dashboard with live updates using API calls to monitor system performance and uptime.
- **Stoplight status system:** Implemented a clear and intuitive "stoplight" status system to quickly communicate the operational status of various Media Cloud services.
- **Performance:** Optimized for speed and minimal resource usage, ensuring that the application is easy to deploy and maintain.

WhereBNB (JavaScript, React, Redux, Ruby on Rails, PostgreSQL, Google Maps API, HTML, SASS, CSS): *An Airbnb-inspired full stack web application.*
Live Site | GitHub

- **Modals:** Built modals using CSS3 and React that provide a seamless user experience, including simplified processes for logging in, logging out, leaving reviews, and booking stays.
- **Custom search component:** Engineered a React search component with a custom Rails route, combined with an ActiveRecord request, to allow for dynamic interaction with the database and robust search responses from the Rails API.

Flux (JavaScript, MongoDB, Mongoose, Express.js, Node.js, SASS, HTML): *A full stack web application trip planner.*
Live Site | GitHub

- Crafted a MongoDB noSQL database with polymorphic associations to better integrate users and their travel plans.
- Facilitated React DateRange correspondence with the MongoDB database to ensure data visualization accuracy in React components, correct formatting for trip dates, and accurate representation of the length of trips.
- Ensured proper information flow, using Mongoose methods, to better populate Axios responses to the front end of the site.

ShowRunner Digest (JavaScript, Vanilla DOM manipulation, Fetch API, D3.js): *A lightweight frontend application about television showrunners.*
Live Site | GitHub

- Using Fetch API, transformed response data from TVmaze API, a digital television guide, into usable objects that powered bar chart visualizations built with the D3.js library.
- Incorporated television graphics by using JavaScript click handlers to toggle classes on various HTML elements and CSS with JS asynchronicity to handle gif animations, which allowed for an engaging user experience when interacting with showrunners.

EDUCATION

University of Connecticut, Spring 2015, *B.A., Political Science*