

Dylan Phelan

Lead Web Developer @ MITRE



🅽 @dtphelan1

in /dtphelan1

Hi, I'm Dylan! I'm a web developer with 6+ years experience working on healthcare, social justice, and benefits delivery projects. I've created UI's using React and Vue, CLIs and APIs using Node.js and Python, ML models using Python, and architecture diagrams/roadmaps to support projects as a technical lead.

Social Justice Resume

Education

MS, Tufts University

Computer Science 2018 - 2021, 4.00 Completed Part-Time

BS, Tufts University

Computer Science, Minor in Philosophy 2012 - 2016, 3.87 Summa Cum Laude

Experience

MITRE Corporation

Technical lead, developer, intern lead, dept. presentation coordinator

Web Dev. 2016 - 2018

Lead Web Dev, 2021 - Now

Senior Web Dev, 2018 - 2021

- Current technical lead & developer on MITRE's oncology moonshot, accelerating cancer datastandards adoption with Open Source applications for data capture, transformation, and visualization
- Prior technical lead & developer for 3+ software teams in charge of Open Source web applications, CLIs, APIs, visualizations, rich-text editors, multipage forms, and more
- Developer for 12+ MITRE projects in oncology, social justice, benefits delivery, and COVID-19
- Runs department presentation series, executed 25+ presentations and project feedback sessions
- · Co-leads department internship program, mentoring 12+ undergraduate and graduate interns

Skills

> 6m > 1yr > 2yr> 4yr

HTML React

Vue 00000 Create React

App Nuxt.js

Next.js 0000 Bootstrap

CSS

Tailwind 00000 SASS

00000

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Node.js Python

JavaScript

HL7's FHIR

GitHub Pages 00000 Vercel 0000

Docker CI/CD Automation

Eslint/Prettier Balsamiq

Work Projects

Unemployment Benefits UI Prototype

Streamline unemployment insurance benefits

Vue

Tech Lead & Web Dev, Mar - Sept 2022

Tailwind

Web Dev, Jan - Sept 2022

Express

- · Created Vue UI to enable research on improving user experience for accessing unemployment benefits
- Implemented Express API for creating, updating, and reviewing unemployment applications
- Distilled MVP requirements from EOY objectives and research team's experimental scenarios
- Balanced competing needs for a rapid prototype and potential use-case pivots

Exhibit MITRE's social justice work in one place

NGINX Express

- Coordinated with MITRE researchers to build web-based interactive report, "The Racial Wealth Gap and Your Household Finances"
- Ported Streamlit and NumPy prototype to HTML/EJS aligned with sjp.mitre.org's design system
- · Integrated Chart JS into our admin-authoring tools, visualizing data with bar and line charts
- · Implemented markdown preview in resource-authoring and rendering on resource-detail views
- Implemented custom URLs on resources at the admin-authoring and page-routing level

Personal Projects

Ranked Choice Voting (RCV) **Simulation Research**



⊕ ♀ ♀ Lead Designer & Web Dev, Sept 2020 - May 2021

Balsamiq

React

Bootstrap

Python

- Explore RCV's impact on representativeness
- Implemented a React web application and Python Flask API for running RCV election simulations
- Designed mockups for defining input parameters and visualizing election outcomes
- Created Flask API for running and aggregating 4 types of RCV simulation
- Visualize outcomes across simulation types, showing RCV's impact on how voters are represented
- Built in collaboration with Moon Duchin and Tufts' Metric Geometry & Gerrymandering Group (MGGG)