



# Dylan Phelan

Lead Web Developer @ MITRE

[dylanphelan.tech](https://dylanphelan.tech)

[@dtphelan1](https://github.com/dtphelan1)

[Dtphelan1@gmail.com](mailto:Dtphelan1@gmail.com)

[/dtphelan1](https://www.linkedin.com/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.

Healthcare 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

## Skills

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

- HTML ●●●●●
- React ●●●●●
- Vue ●●●●○
- Create React App ●●●●●
- Nuxt.js ●●●○○
- Next.js ●●○○○
- Bootstrap ●●●●○
- CSS ●●●●●
- Tailwind ●●●●○
- SASS ●●●○○
- JavaScript ●●●●●
- Node.js ●●●●○
- Python ●●●●○
- HL7's FHIR ●●●●○
- GitHub Pages ●●●●○
- Vercel ●●○○○
- Docker ●●●○○
- CI/CD ●●●●○
- Automation ●●●●○
- Eslint/Prettier ●●●○○
- Balsamiq ●●●○○

## Experience

### MITRE Corporation

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

Lead Web Dev, 2021 - Now  
Senior Web Dev, 2018 - 2021  
Web Dev, 2016 - 2018

- Current technical lead & developer on MITRE's oncology moonshot, accelerating cancer data-standards 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

## Work Projects

### mCODE Extraction Framework (MEF)



Tech Lead & Dev, 2018-Now

Bridge current cancer data to emerging data standard

React Bootstrap Node FHIR

- Built Node command line tool for translating healthcare data from proprietary formats to the minimal Common Oncology Data Elements (mCODE) standard, enabling exchange and reuse of patient data
- Designed a technical architecture enabling modularity across data sources and usecases
- Transformed data from proprietary healthsystem APIs and CSV files into mCODE standard
- Created, managed, and maintained 6+ GitHub repositories in support of multiple usecases
- Enabled MITRE's ICAREdata project to compare routine health data with clinical trial data

### Radiation Therapy Treatment Data (RTTD) App



Tech Lead & Web Dev, May 2022 - Now

Empower discussions on radiation data standards

React Tailwind FHIR

- Built a React app for reviewing data models for cancer radiation treatment summaries, enabling radiation data exchange for care coordination and multi-purpose reuse
- Used Axios to fetch data from FHIR servers and FHIRPath to isolate relevant data for visualizations
- Conducted requirements solicitations from MITRE's RTTD team to enable pen/paper mockups
- Delivered initial prototype within 3 weeks, enabling rapid external stakeholder interviews
- Iterated application based on stakeholder feedback, supporting new request headers, reformatted visualizations, and better metadata displays

### FluxNotes



Tech Lead & Dev, 2017-2019

Re-imagine the clinical note taking experience

React Material UI SCSS FHIR

- Built a SMARTonFHIR React web application for reducing clinician burden collecting cancer data
- Leveraged SlateJs rich-text editor for inline suggestions and data tagging in clinical notes
- Visualized patient data with ReCharts and custom HTML visualizations
- Enabled data provenance tracking via linking to source notes and ElasticSearch document queries
- Received praise from oncologists and MITRE executives, motivating future research on novel data capture techniques