

Ryan Carpus

Web Developer

Full stack developer with a background in civil engineering consulting. Skilled at adapting to client needs to solve unique problems and deliver projects on-budget and on-time.

Portfolio: <https://ryancarpus.com/>

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Location: Ann Arbor, Michigan

Education

CareerFoundry, FullStack Immersion, February 2022

Intensive full-stack project-based web development training program using the MERN stack (Mongo, Express, React, Node)

University of Michigan

Master of Science in Engineering in Civil and Environmental Engineering, December 2017

Bachelor of Science in Engineering in Civil and Environmental Engineering, December 2016

Programming Tools

- **JavaScript**
 - React.JS
 - Next.JS
 - Express.JS
 - Node.JS
- **Python**
 - Numpy
 - Pandas
- **Databases**
 - MongoDB
 - SQL
- PWA (Progressive Web Apps)
- Headless Content Management Services
 - Contentful
- Twilio
- Google Analytics 4

Professional Experience

Web Applications Developer, Michigan Medicine, Ann Arbor, Michigan, 3/2022—Now

- Designed, developed, and deployed an automated reporting system to generate and deliver Twilio messaging and Google analytics reports to stakeholders on a weekly basis, providing new business insights and eliminating the need to manually create reports.
- Designed new web-based tools in collaboration with doctors and graphic designers using Next.JS and Contentful, enabling doctors and patients to easily share tobacco cessation resources via web, text, or email, and to quickly determine drug coverage eligibility and find discount coupons for various T2 Diabetes drugs.

Staff geotechnical engineer, G2 Consulting Group, Ann Arbor, Michigan, 1/2018-10/2021

- Redesigned large portions of the quality system to improve equipment and training documentation and procedures, making lab equipment easier and cheaper to maintain, allowing employees to learn new skills more efficiently and faster, and bringing the lab into compliance with the AASHTO re:source accreditation requirements.
- Wrote a Python script to write QC proposals in Word using a config file and Excel table to adjust project-specific details, reducing errors introduced from carelessly copy-pasting relevant content from old proposals and cutting the cost of proposal-writing by 25%.

Projects

NAVFAC Deep Foundations, 2/2022, sole contributor

rcarpus.github.io/case-studies/navfac.html

- Full stack engineering design application that performs axial capacity analysis for a suite of deep foundations, immensely accelerating design workflow
- Create and manage accounts and save projects using a custom API
- Generate printable calculation reports that can be included in project deliverables

Supersonic Ear Training, 1/2022-2/2022, sole contributor

rcarpus.github.io/case-studies/supersonic.html

- Full stack practice tool enabling musicians to practice hearing if notes are in tune or out of tune
- Save user stats using a custom API and display aggregate statistics to gain insights into overall training progress