

Zach Watkins - Software Developer & Mechanical Engineer

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SUMMARY

Full-Stack software engineer proficient in HTML, CSS, JavaScript and React.js. Five years of experience in mechanical engineering. Passionate for learning and enjoy translating designs and requirements into real life and business applications.

SKILLS

Front-end: HTML, CSS, JavaScript, React.js, React Hooks, Bootstrap, web requests.

Back-end: Node.js, Express

Mechanical: AutoCAD, SolidWorks, ShipConstructor, Inventor, MATLAB.

Miscellaneous: Mocha, Chai, Git, GitHub, Vercel, Heroku, Bluebeam Revu.

SOFTWARE ENGINEERING PROJECTS

Flashcard App | [GitHub Link](#)

08/2022

- Created an application with a finished product to allow for adding, editing, deleting and studying decks of flashcards.
- Designed an interactive web application using React hooks and routers to navigate between multiple decks and cards within.
- Tech: React.js, React Hooks, JavaScript, HTML, CSS, Bootstrap.

Delicious Food Recipe App | [GitHub Link](#)

07/2022

- Developed a recipe tracking app that allows the user to create, delete and track recipes.
- Built an interactive web application using React.js that uses buttons and timers to manage the state of the React application over multiple components.
- Tech: React.js, JavaScript, HTML, CSS, Bootstrap.

ThinkfulBNB | [GitHub Link](#)

07/2022

- Designed and developed a responsive web page using a mobile-first approach for users to find vacation rentals with given dates, locations, and rental types.
- Tech: HTML, CSS, Bootstrap 4, and media queries.

Decoder Ring | [GitHub Link](#)

06/2022

- Created using a Test-Driven Development approach to allow users to encode and decode secret messages using a substitution cipher, Polybius square, or Caesar shift.
- Tech: Mocha, Chai, JavaScript, HTML, CSS.

MECHANICAL/ELECTRICAL ENGINEERING PROJECTS

Shallow Draft ATB Barge | Crowley Fuels

08/2020

- Developed and manufactured multiple pipe systems for Crowley's Fuels' 55K BBL shallow draft ATB barge.
- Led a team of modelers and drafters to design/manufacture piping layout. Coordinated with production on the manufacture of pipe systems as well as structural.
- Tech: AutoCAD, ShipConstructor, Inventor, Excel.
- Engineering Skills: Structural, Piping, Manufacturing.

Oil & Chemical Tank Barge | OSG

11/2019

- Created a 3D model of the structural layout for OSG's oil & chemical tank barge.
- Led a team of modelers and drafters while coordinating with a production team to develop and manufacture a tank barge.
- Tech: AutoCAD, ShipConstructor, Inventor, Excel.
- Engineering Skills: Structural, Piping, Manufacturing.

EXPERIENCE

Greenbrier Gunderson

Portland, OR

Mechanical Design Engineer | Database Administrator

08/2018 – Present

- Collaborate on design and construction of multiple ocean-going marine vessels.
- Utilize 3D CAD knowledge to model hull structure, piping and electrical systems.
- Scrutinized design requirements in order to exceed customer requirements.
- Guide drafters to produce clear and concise drawings, reducing manufacturing time.

- Develop Bill of Materials (BOM) by identifying suitable and cost-effective parts.
- Order equipment and material using DAX software.
- Optimize manufacture time by developing build schedules.
- Make and carry out database administration decisions for software, products, and procedures as well as server management.

EDUCATION

Thinkful

Certificate Software Engineering | Flex

04/2022 – 10/2022

- Software Engineering: Full Stack Software Engineer

Portland State University

Bachelor Of Science | Mechanical Engineering

09/2014 – 06/2016

- Bachelor of Science in Mechanical Engineering