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EDUCATION

Independent Studies, Udemy/FreeCodeCamp

Sept 2020 - Mar. 2017

Relevant Coursework: React, The Complete Guide, Bootstrap from Scratch, The Complete JavaScript Course, Responsive Web Design, Frontend Development Libraries

New York University, Tandon School of Engineering

Bachelor of Science in Mechanical Engineering

Jan 2014 – May 2017

Relevant Coursework: Java Programming Language I, II, Python Programming Language I, II, C++ Programming Language I, II, Data Structure, MATLAB, Statistics, Probability, Linear Algebra, Discrete Mathematics, Senior Design

PROJECTS

3D Society (Ecommerce Platform) - Full Stack Developer

Duration: 9 weeks - github.com/chanliliao/3DSociety

Technologies: MongoDB, Express, React, Node.js, Bootstrap, Redux, PayPal APIs, JSON Web Token, Bcrypt

- Designed an ecommerce platform for 3D printing community including payment integration utilizing PayPal
- Styled using Bootstrap for its' flexibility and responsiveness
- Created private and public routes and login page which utilized JSON Web Token instead of cookies for better security
- Implemented better user security with Bcrypt for its reliability and simple application
- Developed a content management system that allows for management of products, orders, and users

Project Tracker (Activity Management) - Full Stack Developer

Duration: 6 weeks - github.com/chanliliao/Project-Tracker

Technologies: MongoDB, Express, React, Node.is, Materialized, Redux

- Created an activity management application to support project development and tracking of bugs and features
- Developed using Redux over context APIs and MongoDB for scalability
- Styled using Materialized for its' unique look and clean code

Let's Talk Money (Expense Management) - Front End Developer

Duration: 5 weeks - github.com/chanliliao/Lets-Talk-Money

Technologies: React, Custom Hooks, Context APIs, Materialized, Speechly APIs, LocalStorage Cache

- Engineered an expense management application driven entirely by user voice inputs and commands
- Integration with Speechly's voice recognition tech reduces user input time by 40% compared to manual input
- Utilized Local storage allows for instantaneous data access compared to fetching data over network
- Applied context APIs and custom Hooks over redux for maintainability and simplification of code

Quick Chat (Real-Time Messenger) - Full Stack Developer

Duration: 3 weeks - github.com/chanliliao/QuickChat

Technologies: Express, React, Node.js, Socket.IO APIs

- Built a light weight and simplified Realtime instant messenger with WebSocket
- Implemented Socket.IO creating a single TCP/IP socket that is continuous and bidirectional for live chat
- Developed with React for easier reusability and integration on future projects

Wall Climbing RC Car (Senior Capstone Project) - Project Manager & Software Developer

Duration: 24 weeks

Technologies: Python, Raspberry Pi, SolidsWorks, Additive Manufacturing

- Led a group of 6 people to create a wall climbing RC car that utilizes propeller technology as main driving force
- Integrated and mapped RC controller inputs with car's custom propeller system using Python with Raspberry Pi microcontroller to reduce manual controls from 5 to 2 allowing a single operator to control to the car
- Achieved vertical climb of over 2 feet and maintained a constant vertical hold on the wall for 5 minutes

PROFESSIONAL EXPERIENCE

Mechanical Estimator - Donnelly Mechanical, New York

Jun. 2019 - Mar 2021

- Estimated 250+ commercial jobs with an above average 12% award rate on jobs worth \$500,000 to \$6 million
- Establish a department wide HVAC estimating template that is utilized by 6 estimators which increase productivity by 20%

Mechanical Jr. Estimator – All Air Mechanical, New York

Jan. 2018 - Jun 2019

• Estimated 100+ commercial and residential jobs with an average 8% award rate on jobs worth \$50,000 to \$1 million

SKILLS

Advanced: JavaScript, React, Redux, Node.js, Express, MongoDB, VS Code

Intermediate: HTML, CSS, Bootstrap, Hooks, Context API, Git, HTTP/REST, Git Bash, Chrome DevTools, NPM

Novice: Python, Sass, Materialize, mySQL