Benjamin Ku

✉ benku12803@gmail.com | ⚇ github.com/bencodes8 | in linkedin.com/in/benybku | 🖹 ben-ku.vercel.app

EXPERIENCE

Software Developer Intern @ eWorld Enterprise Solutions Jul 2023 → Dec 2023
Java, AngularJS, Springboot, Jira, Bitbucket
- Collaborated with the Department of Transportation Airports division to develop a full-stack web-application to increase document entry efficiency for 400+ users.
- Utilized Agile methodologies to enhance team workflow efficiency for Department of Transportation contracting projects.
- Conducted comprehensive regression testing to verify the proper functionality of the application, ensuring user experience and robust performance.
- Implemented solutions using AngularJS and Spring to manage UI, ensuring intuitive navigation, and efficient RESTful API request handling to backend databases.

PROJECTS

Neural Network Pressure Prediction | *Python3, Numpy, Matplotlib, TensorFlow* Nov 2023 → Dec 2023
- Pre-processed CSV data from FLIR IR camera and Tactilus pressure sensor readings, creating appropriately shaped vectors.
- Wrote Python scripts to dynamically apply a perspective correction algorithm for a colormapped dataset of 40+ files.
- Attained a 73.5% accuracy in predicting pressure maps from IR frames using an Autoencoder network.

Jobseeker Web-App | *Nextjs, Django, Django Ninja REST Framework, MaterialUI* Aug 2023 → Oct 2023
- Built a full-stack jobseeker app allowing users to connect as either a *seeker* or *employer* to facilitate efficient viewing and posting of job listings.
- Utilized Django Ninja to write RESTful API endpoints, effectively handling HTTP requests and ensuring smooth data flow.
- Implemented robust user authorization via JWT authentication, ensuring secure access and protecting sensitive user information.
- Enhanced UI by applying modern design principles and leveraging components using Material-UI.

Network Web-App | *React.js, Django, Bootstrap* Mar 2023 → Apr 2023
- Developed a full-stack social networking app that seamlessly connects users and views posts.
- Integrated schemas created from Django models within RESTful API endpoints, to ensure seamless flow of user-generated content, including posts, likes, and followings.
- Modernized frontend using React components and managing state throughout the application.

EDUCATION

University of Hawaii at Manoa Aug 2021 - Dec 2023
Bachelor of Science Mechanical Engineering *Cum Laude*

CERTIFICATIONS

CS50x: Introduction to Computer Science 2022
CS50w: Web Programming with Python and JavaScript 2023

TECHNICAL SKILLS

Languages: Python3, JavaScript, TypeScript, HTML/CSS, SQL, C
Frameworks/Libraries: Nextjs, React, MaterialUI, Tailwind, Bootstrap, Django, Flask
Misc: Visual Studio Code, Git, Github Desktop, Google Colab, Postman, Jira