Runcheng (Frank) Li

(No Sponsorship Needed)

860-237-2368 | li.runch@northeastern.edu | www.linkedin.com/in/runcheng-li-1b9748205 | Malden, MA

Available from January 2024

EDUCATION

Northeastern University – Khoury College of Computer Sciences Boston, Massachusetts
Master Of Science in Computer Science *Sep. 2022 – Dec.2024*
Relevant Coursework: Algorithms, Web-development, Object-Oriented Design, Human-Computer Interaction
University of Rhode Island – College of Engineering Kingston, Rhode Island
Bachelor of Engineer in Mechanical Engineering *Sep. 2018 – May 2022*

TECHNICAL SKILLS

Languages: JavaScript, Typescript, Java, Python, C, C++, HTML, CSS, SQL, MATLAB
Frontend: React, Vue, Angular
Backend: RESTful API, Node.js, MongoDB
Mechanical Engineer tool: SolidWorks, Simulink, Abaqus, Msc Nastran, 3D Printing
Multimedia Production: Davinci Resolve (Edit, Color, Fusion), Adobe Photoshop & Lightroom (Graphic Design), Figma
Content Creation: Commercial freelance Video Production & Photography

WORK EXPERIENCE

Mechanical Engineer Intern
Hexagon Manufacturing Intelligence (RI) - Design engineer Sep 2021 – May 2022

- Designed a semi hydraulic lifting table system with portability, resulting in a **200% enhancement** in the efficiency of auto-loading for Coordinate Measuring Machines (CMM). Added ergonomic features to the system enhancing the user experience.
- Utilized **SOLIDWORKS** Simulation and applied **CNC** expertise from machine shop operations to complete the assembly design of the lifting system. Conducted evaluations and furnished data to establish maximum operation guidance of the product.

Mechanical Engineer Intern
Global Bedding Solution lnc (MA) - Manufacturer engineer Oct 2021 – Jan 2022

- Applied basic **C++** programming to create a simple controller program that sets various machine operations of coil temperature to increase the consistency of spring coil dimensions.
- Managed and operated machinery for mattress products, including coiling, fabric wrapping, and compression process. Played a key role in operation instruction to faculties, product inspection, optimizing quick and safe delivery of bedding products.

PROJECTS

*Collab – NEU Project Search Website (Full-Stack***)**

- Crafted a user-friendly interface using **Figma, React,** and **JavaScript.**
- Developed a robust backend utilizing **MongoDB** and designed a backend-for-frontend layer for External **API** content discovery.
- Implemented CRUD operations and distinct permission for different users' categories. Enable user-specific database interaction such as project collection and profile edit.

Photo – Shape Model coordinator

- Developed a Java-based photo album animator with a customizable GUI using **Model-View-Controller** (MVC) architecture.
- Integrated various data visualizations, featuring interactive **Java Swing** buttons for user-friendly interaction for various picture input.

RESEARCH EXPERIENCE

Microfluidics and Microsystem Laboratory research (URI) Oct 2021 – Jan 2022

- Research and investigate 3D print clear resin acoustic lab-on-a-chip device, compare with traditional polymethyl siloxane microfluidics device.
- SolidWorks 3D designing for an acoustic pulsatile micropump device. Conduct simulation of a pulsatile blood vessel environment by controlling voltage of transducer.