

# Ruijia Xiong

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## EDUCATION

<b>Northeastern University - Khoury College of Computer Sciences</b> <i>Master of Science in Computer Science</i>   GPA: 4.0/4.0 Courses: Data structure & Algorithms, Web development, Database, Machine Learning	01/2022 – 05/2024(Expected)
<b>Shanghai University of Finance and Economics</b> <i>Bachelor of Economics</i>   GPA: 3.52/4.0	09/2012 – 07/2016

## TECHNICAL SKILLS

**Languages:** Java, Python, C++, C, JavaScript, R, SQL, HTML, CSS  
**Frameworks:** Node.js, Express, Spring Boot, Django, Flask, React, Vue, TensorFlow  
**Tools/Database:** Maven, Git, Vim, Linux, Ubuntu, JUnit, MySQL, PostgreSQL, MongoDB, Axios, AWS

## WORK EXPERIENCE

<b>Research Assistant</b>   <i>Engineering Lab at the Roux Institute</i> , Portland, ME • Built machine learning pipelines using scikit-learn models to evaluate surface roughness of additive manufactured 3D printing models • Developed engines to compare model accuracy and implemented pipelines to analyze feature importance in Laser Powder Bed Fusion process • Analyzed model data and boosted laser printed metal surface roughness by 15% by adjusting laser printing angles	05/2022 – 12/2022
<b>Web Developer Intern</b>   <i>T.M. Herbal Studio</i> , Shanghai, China • Redesigned the web UI using React framework and implemented React hooks within components; Simplified state management with Redux • Coordinated with marketing team for responsive and interactive campaign layouts on web • Developed an internal dashboard showing monthly transactions and sales details using Material-UI	05/2022 – 08/2022
<b>Software Engineer / Operations Analyst</b>   <i>West China Medical Center</i> , Chengdu, China • Managed a team to update the UI of the Hospital Information Systems(HIS) using React.js, promoted the data extraction process for Operations Department and reduced 90% manual work • Developed the internal Information System using Spring Boot; Built the internal payment management systems by integrating WeChat pay and Alipay • Held cross-department tech workshops on topics of HIS functions, Health Care Reform and UI design • Defined the key indicators and redesigned the data extraction and analysis schema with the Operations Team	09/2019 – 12/2021

## PROJECTS

<b>Aircnc Website(Bootstrap, Node.js, MongoDB)</b> <a href="https://github.com/Raexiong/Aircnc">https://github.com/Raexiong/Aircnc</a> • Built dynamic website for users to explore various house rooms and campsites available nearby • Constructed frontend with <b>Bootstrap</b> to streamline the development process and improve user experience • Developed backend framework with <b>Node.js</b> and <b>Express</b> to handle HTTP requests and responses • Set up <b>MongoDB</b> to support data manipulation using CRUD statements for user and campsite information • Utilized <b>Passport library</b> for user authorization and <b>Mapbox API</b> for marking and displaying campsite geo-location	08/2022 – 12/2022
<b>Friends Website(React.js, Spring Boot, MySQL)</b> • Built social media website where users can connect with friends and share posts within their social circle • Implemented frontend using <b>Next.js</b> framework, improved the UI/UX flow with interactive <b>React/Next components</b> , and promoted website layout using <b>Tailwind CSS</b> • Integrated <b>NextAuth.js</b> session management for user authentication and used <b>React Redux</b> for state management	07/2022 – 09/2022
<b>Real-Time Face Mask Detection App(TensorFlow, SSD MobileNet)</b> • Built GUI to detect whether a person wears mask or not by using Google TensorFlow • Prepared image labels using <b>labelImg</b> and customized object detection with <b>SSD MobileNet</b> • Achieved real time detection using <b>OpenCV</b> and a <b>webcam</b> , reached 95% accuracy with green cloth background	01/2022 – 02/2022