# Changchang Li

in changchang-li

# Summary

Master's student in Information Systems with a solid foundation in full-stack engineering, backed by diverse project experiences involving API development, cloud storage (AWS), and database management. Proven problem-solving skills and adaptability. Seeking an innovative internship program to further hone my software engineering expertise. Authorized to work in the U.S. without sponsorship.

#### Education

## **Northeastern University**

Jan 2024 - Dec 2025 (Expected)

Master of Science in Information Systems, Computer Software Engineering Track

Seattle, WA

• Relevant Coursework: Algorithms, Data Science, Web Development, Big-Data Applications, Operating Systems

## **Huazhong University of Science and Technology**

Sep 2016 - Jun 2022

Master's Degree in Clinical Medicine

Wuhan, China

**Huazhong University of Science and Technology** Bachelor's Degree in Clinical Medicine, Bachelor of Art in English (Dual Degree) Sep 2010 - Jun 2015 Wuhan, China

Skills

Programming Languages: Java, Python, JavaScript, SQL

Technical Skills: Full-Stack Development (React, Node.js, Spring Boot), API Design and Development (REST, JSON, GraphQL), Database Management (Redis, MongoDB, SQL Server), Cloud Storage (AWS S3), Version Control (Git), Docker, Desktop Development (JavaFX)

Additional Skills: Project Management (Agile), Machine Learning (TensorFlow, Keras)

# **Projects**

## **Password Management Tool** | Sole Developer | Northeastern University, Seattle

2024

- Developed a secure password management desktop tool using JavaFX, focusing on encrypted storage and user-friendly design, enhanced with AES-GCM encryption to ensure robust security
- Handled the complete development lifecycle, including frontend UI design, backend logic implementation, and data management features like import/export and password retrieval

#### **Surface Crack Detection** | Sole Developer | Northeastern University, Seattle

2024

• Optimized a CNN-based model for detecting concrete surface cracks, achieving 99.455% cross-validation accuracy through advanced data preprocessing and regularization techniques

### Jiangsu Operations Expert Online Project | Project Lead & Underwriting Expert | AIA, China

2021 - 2023

- Led full-stack development of a WeChat Mini Program, aligning Agile development with user needs through requirement analysis, and enhancing user experience with data-driven insights and process improvements
- Collaborated with cross-functional teams to integrate RESTful APIs and Alibaba Cloud for storing user data (e.g., images, chat logs), achieving a 95% problem resolution rate and 98% customer satisfaction

## Experience

#### AIA Life Insurance Company, Jiangsu Branch

Oct 2018 - Jun 2023

Underwriter III

Suzhou, China

- Managed complex underwriting cases by analyzing excess mortality using predictive models, translating business requirements into optimized SQL queries and procedures to automate underwriting workflows, resulting in an 80% automated underwriting pass rate
- Played a key role in digital transformation initiatives, streamlining processes through technical solutions, earning a Silver Prize in 2020 and a Team Gold Prize in 2021

#### Tongji Hospital, Huazhong University of Science and Technology

Aug 2015 - Aug 2018

Resident Doctor

Wuhan, China

 Conducted clinical research using R and SPSS, applying machine learning techniques to process and model large-scale data, and created nomograms for model visualization