Chenjie Wu

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Education

Master of Science, Computer Science

Northeastern University, **Khoury College of Computer Sciences,** Silicon Valley — Expected Dec 2023

- Artificial Intelligence, Computer Vision, Machine Learning, Web Dev

Bachelor of Science, Computer Science

Rutgers, the State University of New Jersey, New Brunswick, NJ — May 2019

- Computer Graphics, Game Science, Computer Security, Internet Technology

Professional Experience

Software Development Engineer Internship — May 2022 - Aug 2023

HireBeat Inc. , Jersey City, NJ

- Devised a practical mock interview platform, utilizing WebRTC for immediate voice communication and improved multiplayer interactions within the Unity WebGL framework using Photon Network
- Designed and implemented a highly efficient serverless web application utilizing React and Typescript
- Incorporated an automated resume scoring system into a web application, enhancing user employability metrics
- Utilized Cypress for seamless and secure login services, improving overall application security and user experience

Software Development Engineer — Dec 2019 - Aug 2021

Wiserun Information System Co., Ltd., Shanghai

- Led Unity3D WebGL-based project for virtual educational laboratory simulation while leading design efforts of 5 persons, and constructed a Directed Acyclic Graph evaluation system for online educational simulation service
- Reported WebGL build-framework bug, investigated building code, and contributed to fix building bug
- Built a real-time client-customizable tasks evaluation system for leveraging Addressable Asset System

Software Development Engineer Internship — Jun 2018 - Jul 2018

Westwell Lab Information and Technology Co., Ltd., Shanghai

- Applied optical character recognition technique to identify vehicle number plate, led to 93% accuracy
- Accomplished ant-colony-optimization to explore Vehicle Routing Problem with Time Windows

Academic Projects

Arrhythmia Detection and Assorted Data Mining Applications — Jan 2023 - May 2023

- Developed a machine learning model for accurately distinguishing cardiac arrhythmias, leveraging the BERT deep learning model and a random forest algorithm, achieving up to 98.45% accuracy
- Hands-on experience in MapReduce, PCA, Association Rule, and Parameter Estimation for real-world applications

Pinterest-like Frontend with MERN Stack — Sep 2022 - Dec 2022

- Designed and implemented a Pinterest-like UI utilizing React.js, delivering a responsive and interactive UX
- Optimized frontend performance by leveraging lazy loading and code splitting, reducing bundle size by 20%
- Engineered RESTful APIs using Node.js and Express.js, and Implemented JWT (JSON Web Tokens) for secure user authentication and session management
- Integrated MongoDB as the backend database, optimizing data models and queries for performance and scalability

CBIR, Real-time 2D Recognition, Augment Reality, Deep Learning — Jan 2022 - May 2022

- Created application for 2D recognition invariant to translation, scale, and rotation with 97.5% accuracy, and implemented Content-based Image Retrieval (CBIR) based on combination of 4 kinds of histograms (C++)
- Developed an Augment Reality (AR) application to calibrating cameras, and to project 3D axes and virtual objects, integrating with OpenGL and compatible with chessboard and ChArUco board (C++)
- Accomplished recognition application by using customized deep learning network in PyTorch with 98% accuracy, and created embedded space of truncated network for different data (Python)

Technical Skills

- Programming Languages: Java, Python, C, C++, C#, JavaScript, SQL, Shell Scripts
- Experience in AI Design, PyTorch, OpenCV, Deep Learning, Reinforcement Learning