Baichuan Li

Curriculum Vitae

College Station, TX — bl30@tamu.edu — (217) 607-4443
https://www.linkedin.com/in/baichuan-li-b0b694184

EDUCATION

Master of Science Computer Science
Year of completion: 2025
Institution: Texas A&M University
Department: Department of Computer Science & Engineering
Accomplished coursework: Data structures, Algorithms Analysis, Data Science, Object Oriented Programming, Software Engineering, Artificial Intelligence, Computer Organizations, Virtual Reality, Data Visualization, Robotics & Spatial Intelligence, Human-AI Interaction.

Bachelor of Science in Mathematics
Year of completion: 2022
Institution: University of Illinois at Urbana-Champaign
Department:College of Liberal Arts & Sciences
Accomplished coursework: Linear Algebra, Probability Theory, Discrete Mathematics, Abstract Algebra, Calculus, Real Analysis.

EMPLOYMENT

Information Technology Intern
06/2023-08/2023
Institution: YAPP USA Automotive Systems, Inc.
Department: Technology department

• Offered hands-on technical support to end-users, skillfully resolving software-related issues, both onsite and remotely, leading to a 20% decrease in the overall number of support requests.

• Delivered renovate on company's official website, include updating the website content, adding product descriptions, images, technical specifications, and relevant documentation by CSS, HTML and JavaScript to ensure accuracy and consistency.

PUBLICATIONS

Conference Journals

Sun, Xiqing, Baichuan Li, and Huatian Pang. "Portfolio construction for pharmaceutical industry." E3S Web of Conferences. Vol. 275. EDP Sciences, 2021.

RESEARCH EXPERIENCE

Autonomous Driving Volunteer Researcher
09/2023-Present
Institution: ENDEAVR Institute(Texas A&M University)

• Execute computer vision algorithms operating OpenCV, and YOLOv8 for object detection and tracking, enabling the vehicle to identify and react to pedestrians, vehicles, and road signs.

• Construct and integrate a pseudo LIDAR system by setting up several cameras and utilizing feature matching algorithms to calculate the depth of objects, revamping the perception capabilities of the autonomous vehicle and reducing costs compared to traditional LIDAR sensors.

Research on AI Tools Tracking Student Handwriting Progression
02/2024-Present
Institution: Texas A&M University

• Automate the diagnosis of handwriting deficiency using computed features and machine learning techniques.

• Establishing guidelines and features for an efficient handwriting monitoring system tailored for teachers.

• Creating a prototype based on feedback from daycare teachers and education practitioners, ensuring the system aligns with practical needs in the educational context.

PROJECT EXPERIENCE

NXTFOLIO Creative Fashion App Project
01/2023-05/2023

• Implemented Agile methodology and coded using Ruby on Rails to develop a visual "LinkedIn" app for Creative/Visual/ Fashion industry professionals, matching professionals based on specific job needs.

• Optimized search engine by deploying specific sorting and filtering algorithms to generate more accurate keywords matching and display priority.

• Devised a matching system for professionals to upload visual portfolios and find matches of other professionals based on specific job needs.

• Utilized Cucumber testing framework as a BDD approach to perform comprehensive testing of the application.

TECHNICAL SKILLS

•Programming Languages: Java, Python, C++, C, Ruby&Rails, MySQL, Shell Script, JavaScript, HTML, CSS.
•Frameworks: Express, Node, Pandas, OpenCV, React, Unity, Robot Operating System (ROS).
•Tech-Stack: Git, Cucumber, BootStrap, Linux, Github, Restful API, SaaS, Auto testing, Latex.