

# Baichuan Li

## Curriculum Vitae

College Station, TX — bl30@tamu.edu — (217) 607-4443  
<https://baichuan0113.github.io>

## EDUCATION

---

### Master of Science in 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

Rosendo Narvaez, Baichuan Li, and Tracy Hammond. "Looking at the difference in Pen Gestures of Preschool Age Children" IUI, 2025. - In progress

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

## RESEARCH EXPERIENCE

---

### Research on Prompt Engineering for Enhancing Formative Feedback with LLM Models

08/2024-Present

Institution: Utah State University Computer Science Education Group

- Collected data from 48 CS1 students across 5 lab assignments to assess the impact of formative feedback generated by different LLM models.
- Developed and implemented customized prompts to compare learning gains and feedback alignment across 3 LLM models.
- Administered pre-surveys and post-surveys to evaluate the quality and effectiveness of formative feedback in improving student learning outcomes.
- Performed ANOVA and group analysis to assess learning gains, along with the impact on student motivation based on survey responses.

### Research on Children's handwriting between different age groups

06/2024-Present

Institution: Texas A&M University

- Conducted a study of 53 children ages 3-5 with over 700 pen gestures across 14 shapes of varying difficulty.
- Compare differences in kinematic, pressure, and geometric features across age groups across ages 3.5-7 through T-Test and one-way ANOVA analysis.
- Gain insights into how children's pen gestures change as they develop.

## 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.