Alex Chen

Dallas, TX, USA

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Education

Southern Methodist University, Dallas, TX

January 2025—May 2028 (Expected)

Ph.D. in Computer Science (Research Focus: Artificial Intelligence in Healthcare)

• Conduct research on predicting early symptoms of Alzheimer through AI

Southern Methodist University, Dallas, TX

August 2022—Dec. 2024

Bachelor of Science: Computer Science – Artificial Intelligence and Machine Learning Track

• **GPA:** 3.893/4.0

• Scholarships: Honor Transfer Scholarship, June/July Intersession Scholarship

Publications

- Cheng Huang, Qiuyu Luo, Mohammad Ausaf Ali Haqqani, Junhao Shen, Beichen Hu, Chang Liu, Yuxuan Sun, **Dongyang Chen**, Weizheng Xie, Tsengdar Lee, and Jia Zhang. "GB-YOLO: Abnormal Target Detection and Segmentation for Industrial Remote Sensing" *IEEE Signal Processing Letters*, under review, 2024.
- Cheng Huang, Junhao Shen, Beichen Hu, Qiuyu Luo, **Dongyang Chen**, Karanjit Kooner, Tsengdar Lee, Yongbin Yu, and Jia Zhang. "**DA-SPL: Dual-Attention Semantic Parallel-LSTM Network for Medical Report Generation**" *IEEE Transactions on Medical Imaging*, under review, 2024. **Experience**

Research Assistant, Southern Methodist University, Dallas, TX

August 2024—Present

- Conducting research on AI-related topics, with a primary focus on crack detection using YOLO
- Developed and updated the SMU Hub, a platform connecting local industries with SMU students and faculty

Summer Research Intensive, Southern Methodist University, Dallas, TX May 2024—August 2024

- Write and use Python class for various lab instruments (i.e. spectrum analyzer) to perform QA test on VTRX+ transceivers for the ATLAS experiment at CERN in SMU's Physics Electro-Opto lab
- Maintained and organized the lab environment, including hardware setups and labeling
- Participated in weekly SRI meetings to discuss and report progress on assigned tasks

Teaching Assistant, Southern Methodist University, Dallas, TX

August 2023—May 2024

- TA for Discrete Comp Structures, graded students' HWs, quizzes, and exams
- Tutor students throughout the week in topics such as graph theory and proofs both in person and online
- Help professor with proctoring quizzes, exams, and setting up zoom meetings for lectures

Skills

- **Programming Languages:** C++, Java, JavaScript, Objective C, Python, Swift, TypeScript, CSS, HTML, SOL
- Tools: CLion, Excel, Git, GitHub, IntelliJ, MySQL, Node.js, Notion, PowerPoint, Project, React, React Native, Spring Boot, Visual Studio Code, Word, Xcode

Projects

Recommendation System Model for The Social Panacea

September 2024—November 2024

Recommendation system model for a new social app called *The Social Panacea*

- Developed an AI solution to recommend potential friends based on individual user preferences using collaborative filtering
- Preprocessed user data with word embedding, normalization, and categorization for improved recommendation accuracy
- Built using Python and Firebase