

BLAKE OLSON

blakeaolson1@gmail.com | 512-670-6814 | linkedin.com/in/blakeaolson | blakeaolson.github.io

EDUCATION

University of Texas at Austin

M.S. in Computer Science • On campus (3% acceptance rate)

May 2027

Relevant Courses: Machine Learning, Natural Language Processing, Deep Learning

Texas A&M University

B.S. in Computer Science • Minor in Mathematics

May 2025

GPA: 3.92/4.0 | CS Honors

Relevant Courses: Machine Learning, Deep Learning, Algorithms, Honors Linear Algebra, Multivariate Calculus

Awards: Undergraduate Research Excellence Award

EXPERIENCE

Google

Aug 2025 – Nov 2025

Software Engineering Intern

Mountain View, CA

- Working on AI Search Overview

Apple

May 2025 – Aug 2025

Software Engineering Intern | AI, ML, Swift, Python, UIKit, SwiftUI, CoreML, NLP

Cupertino, CA

- Ranked **1st** among interns in organization and selected to present to Senior VP of Software at final showcase
- Engineered an intelligent content generation system using a secure 3B on-device language model
- Implemented caching system for AI generated content that reduced internal API calls by **32%**

Texas A&M DIVE Lab

Feb 2024 – May 2025

Machine Learning Researcher | *Python, PyTorch, Deep Learning, NLP, Linux, AI, ML, RL*

College Station, TX

- Post-trained Qwen-1.5B language model using RL to achieve **11.8%** increase in accuracy on gsm8k math dataset
- Created a robust benchmark (Sys2Bench) that measures **4** different LLM inference-time techniques on **10** datasets
- Optimized novel LLM inference-time technique that improves accuracy by **183%** on key planning benchmarks
- Utilized PyTorch and RDKit to align 3D molecular structures, training a novel SBDD method in a recent ICLR paper

Esri

May 2024 – Aug 2024

Software Development Intern | *Swift, UIKit, SwiftUI, Git, ArcGIS, Cocoa Touch, Xcode*

Vienna, VA

- Engineered task with no location feature using Swift and UIKit that was deployed to **50,000+** users
- Improved notification reports algorithm efficiency by **24.5%** using hashing and sets

IBM (formerly Dialexa)

May 2023 – Aug 2023

Software Engineer Intern | *SQL, Swift, UIKit, TablePlus, Docker, Postgres, Git, Jira*

Dallas, TX

- Refactored vision diagnosis application using Swift to reduce language page load time by over **31%**
- Leveraged Docker, TablePlus and PHP to write SQL for rest API requests consumed by **10,000+ clients**

SKILLS

Languages: Python, Swift, C++, Java, C, SQL, PHP

Technologies: PyTorch, SwiftUI, UIKit, React, Docker, TablePlus, Express.js, Git, Postgres, Jira, Heroku

PUBLICATIONS

Parashar, S., Olson, B., Khurana, S., Li, E., Ling, H., Caverlee, J., Ji, S. (2025) **Inference-Time Computations for LLM Reasoning and Planning: A Benchmark and Insights** arXiv

Ling, H., Parashar, S., Khurana, S., Olson, B., Basu, A., Sinha, B., Tu, Z., Caverlee, J., Ji, S. (2025) **Complex LLM Planning via Automated Heuristics Discovery** arXiv

Fu, C., Li, X., Olson, B., Ji, H., Ji, S. (2025) **Fragment and Geometry Aware Tokenization of Molecules for Structure-Based Drug Design Using Language Models**. ICLR Poster