

Jonah Blackmon

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EDUCATION

The University of Texas at Austin, Austin, TX

May 2028

Bachelor of Science, Computer Science, GPA: 3.91/4.0

Relevant Coursework: OS, Computer Architecture, Data Structures, Autonomous Robotics, Linear Algebra, Discrete Math

EXPERIENCE

Undergraduate Course Assistant for Discrete Mathematics

August 2025 - Present

The University of Texas at Austin | Austin, TX

- Supported instruction for 400+ students through office hours and independently led classes of 30+ students
- Assisted faculty in developing course materials and teaching strategies to improve learning outcomes

Undergraduate Student Researcher

January 2025 - Present

Living with Robots Lab, Texas Robotics | Austin, TX

- Research with a focus on autonomous intelligent robotics and their role in human-robot interaction
- Developed a gesture-based interaction model for industrial robots that can interact with users in real time
- Developing a Multi-Modal LLM solution for interpreting gestures in conversational contexts

Software Engineer

September 2025 - Present

Longhorn Developers | Austin, TX

- Developer fellow for the Longhorn Developers UT Mobilize team at the University of Texas at Austin
- Developing a mobile app to assist UT students with disabilities in navigating campus using accessible routing

Information Technology Intern

May 2025 - August 2025

IT Integrations | Fort Worth, TX

- Led the digital migration of healthcare facilities across Texas that support 150+ users to a new network system
- Provided on-site troubleshooting to resolve hardware and software issues during the network's transitions

PROJECTS

CampusNav - Full-Stack Navigation App | Swift, Git, Firebase, MapBox, MapKit, SwiftUI

- Published a navigation app specifically for college campuses to improve the student experience of getting to class
- Implemented a custom A* routing engine over a complete graph of entrances/pathways, leveraging existing databases, optimizing routes through buildings and pedestrian shortcuts, reducing average walking time by 30%

UR5 Human-Robot Interaction Framework | ROS2, Python, OpenCV, Git

- Built a modular ROS2 framework for gesture recognition, dynamic motion, and real-time imitation on a UR5 arm
- Reduced hand detection latency by ~47% and enabled scalable gestures with state-dependent trajectories
- User studies showed higher social compliance with ratings rising from 1.65/5 to 4.65/5 after greeting integration.

CarGaze - HackTX Best Pitch Winner Fall 2025 | Swift, Supabase, Google Gemini, SwiftUI

- Led full-stack development for a mobile app that pairs users with cars tailored to their budget and preferences, winning Best Pitch among 1,000+ competitors for innovation and technical execution.

Quotelt - Full-Stack Anonymous Social Media Audio App | Swift, Firebase, AVFoundation, SwiftUI

- Built and published an anonymous social platform enabling real-time audio transcription and quote sharing
- Implemented a low-latency audio streaming pipeline with AVFoundation and Firebase for scalable transcription

LEADERSHIP & COMMUNITY INVOLVEMENT

ECLAIR Robotics, Austin, TX

September 2024 - Present

Member, C.R.A.C.K.L.E. (Contextual Robotics Arm for Knowledge Learning and Exploration)

- Worked on gesture detection using Leap Motion and integrated ML algorithms for contextual robotic response

Levinson Foundation, Santa Fe, NM

June 2023 - Present

Next-Gen Board Member

- Appointed to youth board researching and funding activism initiatives; responsible for the disbursement of \$100,000 of funding to organizations, as well as attending national conferences and climate advocacy events

SKILLS

Languages: Java, Python, Swift, C, C++, JavaScript, HTML, CSS, Assembly

Tools & Frameworks: React, SwiftUI, ROS2, Azure, Firebase, Git, Linux, OpenCV, AVFoundation, MapBox, MapKit

Related Skills: CAD, Blender, Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Adobe After Effects