Contact

vicalexsim@gmail.com

www.linkedin.com/in/victorasim (LinkedIn)

Top Skills

Capture the flag Embedded Systems Wireshark

Languages

Vietnamese (Elementary)
English (Native or Bilingual)

Certifications

Certificate – Computer Science & Information Technology Field of Study

Technical Support Fundamentals
CompTIA A+ ce Certification

Honors-Awards

TMTA SA (Superior Award) Theory Medals - Whitlock Theory Tests.

First Lego League Robotics Competition (Animal Allies) Semi-Finalist.

AP Scholar Award (2020)

Sonatina Festival 2013 Trophy - Outstanding Piano Player

American Festival 2012 Trophy - Outstanding Piano Player

Victor Sim

3x Hackathon Winner | Meta/Algoverse Al Researcher | Ex SWE NASA | Ex DS Verizon Fiber (Frontier Internet) (BreakThroughTech) | Codepath | CS @UTD, Dean's/Pres's List @Collin | Software Dev | Seeking Tech Internships/FT

Dallas-Fort Worth Metroplex

Summary

Current Computer Science student with knowledge and experience in Javascript, C++, Python, Kotlin, and Assembly, and working towards Network+ and Security+ certifications. Strong learning drive, and the ability to adapt to different situations. Solid work ethic, teamoriented, and ability to manage time well. Considered hardworking, punctual and driven. Offering excellent communication and good judgment. Trying to gain work experience and internships.

Studying at UTD to get a Bachelors of Computer Science 2026. In the National Science Foundation Undergraduate Fellowship with Scholarship for STEM research.

As for my future, I hope to one day work in some kind of technical role/position in Texas and work with a diverse team that is able to get things done in an orderly fashion. Interested in Cybersecurity, Machine Learning, AI, DevOPs, App development, Computer Vision, Game Development, and System Design. Tech interest grew from robotics and gaming.

Email (business): VicAlexSim@gmail.com

Experience

The University of Texas at Dallas
Undergraduate Researcher
September 2023 - Present (2 years 2 months)

Richardson, Texas, United States

- SSTEM Scholar (San Diego 2025)
- NASA Micro G Next Fall 2023
- Dynamic Neural Network Optimization Fall 2024
- UTD Nova Autononmous Vehicle Robotics Lab Fall 2025

DEEP (Design and Engineering Experiences Projects) Program for NSF S-STEM Transfer Students & RIDE Program (Research, Inquiry, Design Experiences). First NSF S-STEM Transfer Cohort. Given research opportunities by Mechanical Engineering Head of Department Dr. Joshua Summers, Mechanical Engineering Professor Justin Ruths, Al/ML Professor Wei Yang, and Associate Dean of Undergraduate Education/NSF Principal Investigator/NSF S-STEM Scholarship Head Dr. Amy Walker.

Raytheon

Software Engineer Intern January 2025 - May 2025 (5 months)

Dallas, Texas, United States

Senior Design Project - Predictive Analytics App for Plane Emissions from ICAO Aircraft Emissions Dataset

Algoverse

Al Researcher

November 2024 - May 2025 (7 months)

Dallas, Texas, United States

Berkeley Research Program. Accepted into CLVision. Worked with Meta and OpenAl mentors.

Toyota Motor Corporation
Cyber Security Engineer
September 2024 - October 2024 (2 months)
Dallas, Texas, United States

- Led a team of Python developers with CAN & UART network protocol logging, sending, & analysis with RAMN ARM Cortex chip, RaspBerry Pi Micro, & PASTA (Portable Automotive Security Testbed) to test 6+ Car Electronic Control Units, using PCAN & SLCAN (30+ security vulnerabilities problems)
- Toyota Hackfesta 2024 CTF (Ramn, Pasta, Can, Jupyter, Python, Raspberry Pi (PICO))
- https://ctfd.io/case-studies/toyota/
- https://ctfd.io/case-studies/
- https://www.chip1stop.com/sp/products/toyota-pasta_en
- https://ramn.readthedocs.io/en/latest/index.html
- https://github.com/ToyotaInfoTech/RAMN
- https://ghidra-sre.org/

- https://github.com/NationalSecurityAgency
- https://github.com/kentindell/canhack
- https://github.com/TeraTermProject
- https://personal.utdallas.edu/~John.Cole/ToyotaHack-2023.pdf

NASA - National Aeronautics and Space Administration Research Development Software Engineer November 2023 - July 2024 (9 months)

Houston, Texas, United States

- Trained a custom Yolov8 model at 300 epochs to get proper object detections for NASA safety equipment.
- NASA Micro-g University NeXT SPOTR (Search and Rescue Operations)
 Challenge (10th year) from Challenge owner Cody Kelly @NASA Image
 recognition/object detection software development project & research group Python Neural network.
- Selected to test at NASA, 2024 1/3 teams selected for the 4th challenge from around the country (Top Schools & Ivies review for selection). Ocean Beacon and Object Locator (OBOL) project UTD Team Charon. 3rd team in UTD History. Testing in June 2024. 17 Micro G teams selected overall. Mentored by NASA Engineer Jayesh Naik.

Frontier Internet
Data Scientist
April 2024 - June 2024 (3 months)
Remote

- University of Texas System Break Through Tech SpringInternship 2024 Host for Interns
- Working with 15 other Interns (UT Austin, UT Arlington, UTD, UT San Antonio, UT Tyler).

Break Through Tech Software Engineer Intern March 2024 - June 2024 (4 months) Dallas, Texas, United States

- One of eight selected from a large number of applicants at UTD, selected from a large pool of all UT system student applicants, 1st Texas Cohort.
- Working Collaboratively with other fellow students within the University of Texas System.

- Taking on an Al Software Development Challenge from a Host Employer -Frontier Communications (with 1 month Onboarding/Professional Development in April and 1 month work experience in May)
- WAKKA.AI-Powered Bootcamp
- https://www.breakthroughtech.org/university-of-texas-sprinternship/

Headstarter Al Software Engineer July 2023 - September 2023 (3 months) Remote

- Built and deployed 5 Al Wrapper and CRUD projects in 5 weeks using React JS, Next.js, Firebase, Clerk, and Vercel, following agile methodologies with weekly sprints and incorporated CI/CD practices for iterative deployment
- Worked in a team of 3 to develop an interactive customer support agent using Next.js, integrated a custom RAG pipeline using OpenAl and Pinecone that responds based on a company's knowledge base
- Collaborated with 3 Fellows to build and deploy a SaaS product that generates dynamic flashcards based on any topic using the GPT 3.5 Turbo LLM via the OpenRouted API, integrating a paywall and custom pricing plans using the Stripe API
- Implemented a web scraper that automatically extracts data from Rate my Professor and upsert to a Pinecone index, integrated with a RAG pipeline using LangChain and Gemini 1.5 Flash to get up-to-date and relevant answers to user queries
- Participate in weekly sessions with engineers from Google, Y Combinator, Stanford, Amazon and venture-backed startups
- Prototyped a user-oriented final project (shopping list extension + chatbot)
 (50 users)

Kroger

7 months

Cashier

April 2022 - August 2022 (5 months)

Allen, Texas, United States

- Provided a cordial, customer-oriented environment with 95% customer satisfaction upon administering assistance cited from Customer Satisfaction report.
- Awarded employee of the month 3 times by exhibiting a user-oriented approach & skillfully multitasking in a fast-paced environment.

 Improved Customer Service employee standards within 3 months of employment from Customer
 Satisfaction Report.

Courtesy Clerk

February 2022 - August 2022 (7 months)

Allen, Texas, United States

• Promotion to Cashier after 2 months.

Education

The University of Texas at Dallas

Bachelor of Science - BS, Computer Software Engineering · (August 2023 - May 2027)

Cornell University

Computer Science · (March 2024 - June 2024)

CodePath

Certificate, Computer Software Engineering · (January 2024 - June 2024)

Per Scholas

Certificate, Computer/Information Technology Administration and Management · (December 2023 - March 2024)

Collin College

Associate of Science - AS, Computer Science · (June 2021 - May 2023)