

# Srilokh Karuturi

[srilokh.karuturi@gmail.com](mailto:srilokh.karuturi@gmail.com) • <https://sai-k02.github.io/> • 512-827-1031 (mobile) • GPA: 3.3 • Grad: May 2023

## EXPERIENCE

<b>BlockTrace, Dallas, TX, Software Engineering Consultant</b> <ul style="list-style-type: none"><li>Query Mainnet Blockchains using nodes for blocks, transactions, hash rate, difficulty, height, etc.</li><li>Create 5+ Comprehensive Jupyter Notebooks for data analysis, milestones, development, etc.</li><li>Access Public &amp; Private API's to Query Data in JSON &amp; XML &amp; Simple Text for Python Data Analysis</li></ul>	<b>December 2021 – Present</b>
<b>BlockTrace, Austin, TX, Software Engineering Unpaid-Intern</b> • Build applications for cryptoanalysis <ul style="list-style-type: none"><li>Maintain virtual machines which act as test nodes for development, testing, data, etc.</li><li>Assess to understand network traffic between nodes using Wireshark Bitcoin Protocol</li><li>Show Proficiency in Python, JSON, Java, C++, CLI Commands, etc.</li><li>Explain complex concepts in simple manner(Blockchain Technology, Peer-to-peer, Proof-of-work, smart contracts, GAS fees, etc.)</li></ul>	<b>August – December 2021</b>
<b>Tom Glenn High School, Leander, TX Information Technology Assistant</b> • Technology Deployment & Mentorship Help IT Director to setup/deploy over 1000 Lenovo ThinkPad's, iPads, etc. <ul style="list-style-type: none"><li>Actively help 5+ students daily with devices, laptop renewal, troubleshooting</li></ul>	<b>Aug – Dec 2018</b>
<b>Target Corporation, Cedar Park, TX, Guest Advocate</b> • Head Cashier • Guest Service Rep • Front End <ul style="list-style-type: none"><li>Serve excellent guest service, reinforce promotion strategies</li><li>Perform strategic discussions for over 72 transactions per shift to increase sales and satisfaction</li><li>Push over 100+ Carts, 50+ Stock, 50+ Online-Orders daily</li></ul>	<b>Nov 2018 – Oct 2020</b>

## PROJECTS

<b>AI UTD BUILDING IDENTIFIER IOS APP</b> • Artificial Intelligence/Machine Learning • CoreML • Swift /SwiftUI <ul style="list-style-type: none"><li>Use Apple's Vision Library, Core ML from XCode, and "S(Casp)" common sense reasoning to identify buildings on UTD campus with an IOS application (UTD HackReason 2022)</li><li>Create/Train a ML model by recognizing pixel/color patterns via Convolutional Neural Network</li></ul>	<b>January 2022</b>
<b>PYTHON DATA CLEANING/ANALYSIS SCRIPTS</b> • BlockTrace • C++, Python, UNIX <ul style="list-style-type: none"><li>Access Public &amp; Private API's to Query Data in JSON &amp; XML &amp; Simple Text for Python Data Analysis(Investigation Purpose)</li></ul>	<b>January 2022</b>
<b>BITCOIN TEST NODES</b> • BlockTrace • C++, Python, UNIX <ul style="list-style-type: none"><li>Compile Two Independent Bitcoin Core Nodes via testnet</li><li>Present 10+ use cases of Bitcoin-CLI for investigation, development, data fetching, etc.</li><li>Use WireShark's official Bitcoin Protocol to view 100+ network packets for assessment</li></ul>	<b>August – December 2021</b>
<b>MIPS SNAKE GAME</b> • Computer Architecture • MIPS Assembly <ul style="list-style-type: none"><li>Recreate Snake using MIPS &amp; Mars IDE(Bitmap Display, Keyboard)</li></ul>	<b>Nov 2021</b>
<b>BINARY SEARCH TREE WORD CROSS REF</b> • Computer Science II • Java <ul style="list-style-type: none"><li>Program will list words on the fly in Alphabetical order(using BST) from any word document</li></ul>	<b>October 2021</b>
<b>QUADROPOLE LAB</b> • Engineering Physics 2 • Python • Integral Calculus <ul style="list-style-type: none"><li>Visualize the slingshot effect of an electron from the electric field created from a quadrupole using Visual Python</li></ul>	<b>July 2021</b>

## ACTIVITIES:

<b>Infix/Prefix/PostFix Visualizer</b> (in progress) <ul style="list-style-type: none"><li>Create a revenue generating website which will create a tree from prefix/infix/postfix expressions</li></ul>	<b>December 2021 – Present</b>
<b>UTD TEXSAW 2020 COMPETITION</b> • Placing Top Ten • Virtual Capture the Flag Competition for Cybersecurity <ul style="list-style-type: none"><li>Web Security, Penetration Testing, Forensics, Crypto, Pwn, Reverse-Engineering, Web-Analysis</li></ul>	<b>November 2020</b>
<b>CodePath Cybersecurity Accelerated 6 Weeks Course</b> <ul style="list-style-type: none"><li>CTF/Project Based approach to learning fundamentals of Cyber Security</li><li>OWASP Top Ten, SQL Injection, Web Application Vulnerabilities, Pwn, etc.</li></ul>	<b>January 2020 – April 2020</b>
<b>Kattis Problem Archive</b> • ranked <u>16,371 out of 200,000+</u> <ul style="list-style-type: none"><li>solve challenging critical thinking problems using Java, C++, Python (used for contest by ICPC)</li></ul>	<b>June 2021 – Present</b>

## LANGUAGES & TECHNOLOGIES:

- Python, C++, Java, Lua, HTML/CSS,SCSS/JS, JSON, Swift, Pandas, NumPy, Matplotlib, Vpython, OpenGL, GLEW/GLFW3, MIPS
- Burp Suite, Microsoft Office, JetBrains Suite for Software Development, XCode, Jupyter Notebook, Wireshark, VS Code, Git

## EDUCATION:

<b>The University of Texas at Dallas</b> • GPA: 3.1 • Total Credits: 19	<b>Jan 2021 – May 2023</b>
<b>Bachelor of Science in Computer Science</b> • Total Credits: 82/124	
<b>Austin Community College</b> • GPA: 3.3 • Total Credits: 63	<b>Aug 2017 – Aug 2021</b>
<b>General Studies</b>	