# Srilokh Karuturi

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

#### **EXPERIENCE**

### BlockTrace, Dallas, TX, Software Engineering Consultant

December 2021 - Present

- Query Mainnet Blockchains using nodes for blocks, transactions, hash rate, difficulty, height, etc.
- Create 5+ Comprehensive Jupyter Notebooks for data analysis, milestones, development, etc.
- Access Public & Private API's to Query Data in JSON & XML & Simple Text for Python Data Analysis

## BlockTrace, Austin, TX, Software Engineering Unpaid-Intern• Build applications for cryptoanalysis

August - December 2021

- Maintain virtual machines which act as test nodes for development, testing, data, etc.
- Assess to understand network traffic between nodes using Wireshark Bitcoin Protocol
- Show Proficiency in Python, JSON, Java, C++, CLI Commands, etc.
- Explain complex concepts in simple manner(Blockchain Technology, Peer-to-peer, Proof-of-work, smart contracts, GAS fees, etc.)

Tom Glenn High School, Leander, TX Information Technology Assistant • Technology Deployment & Mentorship Aug – Dec 2018

- Help IT Director to setup/deploy over 1000 Lenovo ThinkPad's, iPads, etc.
- Actively help 5+ students daily with devices, laptop renewal, troubleshooting

Target Corporation, Cedar Park, TX, Guest Advocate • Head Cashier • Guest Service Rep • Front End

Nov 2018 - Oct 2020

- Serve excellent guest service, reinforce promotion strategies
- Perform strategic discussions for over 72 transactions per shift to increase sales and satisfaction
- Push over 100+ Carts, 50+ Stock, 50+ Online-Orders daily

#### **PROJECTS**

AI UTD BUILDING IDENTIFIER IOS APP • Artificial Intelligence/Machine Learning • CoreML• Swift /SwiftUI

January 2022

- 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)
- Create/Train a ML model by recognizing pixel/color patterns via Convolutional Neural Network

### PYTHON DATA CLEANING/ANALYSIS SCRIPTS • BlockTrace • C++, Python, UNIX

January 2022

• Access Public & Private API's to Query Data in JSON & XML & Simple Text for Python Data Analysis(Investigation Purpose)

#### BITCOIN TEST NODES • BlockTrace • C++, Python, UNIX

August - December 2021

- Compile Two Independent Bitcoin Core Nodes via testnet
- Present 10+ use cases of Bitcoin-CLI for investigation, development, data fetching, etc.
- Use WireShark's official Bitcoin Protocol to view 100+ network packets for assessment

MIPS SNAKE GAME • Computer Architecture • MIPS Assembly

Nov 2021

• Recreate Snake using MIPS & Mars IDE(Bitmap Display, Keyboard)

## BINARY SEARCH TREE WORD CROSS REF • Computer Science II • Java

October 2021

Program will list words on the fly in Alphabetical order(using BST) from any word document

### **QUADROPOLE LAB** • Engineering Physics 2 • Python • Integral Calculus

July 2021

• Visualize the slingshot effect of an electron from the electric field created from a quadrupole using Visual Python

#### **ACTIVITIES**

## Infix/Prefix/PostFix Visualizer (in progress)

December 2021 - Present

• Create a revenue generating website which will create a tree from prefix/infix/postfix expressions

**UTD TEXSAW 2020 COMPETITION** • Placing Top Ten • Virtual Capture the Flag Competition for Cybersecurity

November 2020

• Web Security, Penetration Testing, Forensics, Crypto, Pwn, Reverse-Engineering, Web-Analysis

### **CodePath Cybersecurity Accelerated 6 Weeks Course**

January 2020 - April 2020

- CTF/Project Based approach to learning fundamentals of Cyber Security
- OWASP Top Ten, SQL Injection, Web Application Vulnerabilities, Pwn, etc.

### Kattis Problem Archive • ranked 16,371 out of 200,000+

June 2021 - Present

• solve challenging critical thinking problems using Java, C++, Python (used for contest by ICPC)

#### **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:**

The University of Texas at Dallas • GPA: 3.1 • Total Credits: 19
Bachelor of Science in Computer Science • Total Credits: 82/124

Jan 2021 - May 2023

Austin Community College • GPA: 3.3 • Total Credits: 63

Aug 2017 - Aug 2021

**General Studies**