# Viraj Sabhaya

Arlington, Texas, 76010

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## EDUCATION

**University of Texas - Arlington**  Jan. 2020 – Dec. 2023
*Bachelor of Science in Computer Science*  *Arlington, Texas*

## TECHNICAL SKILLS

**Languages:** Python, Java, C/C++, HTML, JS, Rust, Node.js, SQL, CSS, Swift
**Developer Tools:** VS Code, Android Studio, Figma, Adobe XD, Xcode, gcc/g++, GitHub, Raspberry Pi, Linux
**Technologies/Frameworks:** Git, Alpha Vantage API, JavaFX, NumPy, Pandas, MatPlotlib, Scipy, Sklearn, Seaborn, OpenCV, nltk, Pyvis, NetworkX, Plotly, Bokeh, iGraph

## PROJECTS

**Visualization for MultiLayer Network** | *Python, Plotly, NetworkX, Bokeh, MatplotLib, Numpy, Pandas*  **On-going**
- Developing algorithms to visualize Layers generated, in the form of nodes(Vertices), and their edges(Relations)
- This module is also able to visualize the analyzed results from the generated layers, in the form of Community Network Graph Visualization.
- Allows users to easily explore the node interactions and explore community structure of a network

**DataSource** | *JS, python, cypress, Selenium at **SECURONIX***  **Aug. 2022**
- Conducted successful automation tests on Threat detection software.
- Created an automation tool to convert CSV to required JSON libraries

**Web Poker** | *Java, HTML, CSS, JavaScript* | ⬡ github.com/virajsabhaya23/WebPoker_8.git  **Feb. 2022 - May 2022**
- A web application using OOPs concepts, HTTP server, and WebSockets

**Fat32 User Shell** | *C/C++* | ⬡ https://github.com/kmosoti/FAT32-User-Shell.git  **April 2022**
- A user space shell application that can interpret a FAT32 system image.

**Arena Allocator** | *C/C++, LinkedList* | ⬡ github.com/virajsabhaya23/ArenaAllocator.git  **March 2022**
- Implemented a Memory Allocator for my Operating Systems class.
- Wrote algorithms for FIRST_FIT, NEXT_FIT, WORST_FIT and BEST_FIT algorithms

**Fractal, Image computation** | *C/C++, Operating System* | ⬡ github.com/virajsabhaya23/Fractal.git  **Feb. 2022**
- Implemented threads to compute the Mandelbrot set of images.
- Learned how threads reduce the amount of time for execution and make the process faster

**Personal Web Portfolio** | *HTML, CSS, React, Node, JavaScript*  **Feb. 2022**
- ⬡ https://virajsabhaya23.github.io/VS_WebPortfolio/

**Stock Management System** | *Java, GUI, JavaFX, APIs* | ⬡ SMS  **Nov.2021 - Dec. 2021**
- A GUI application for managing one's portfolio and for investments.
- Using the Alpha Vantage API to keep track of real-time stock details.

## EXPERIENCE

**Student Research Assistant**  **October 2022 – Present**
*UTA IT Lab, UTA*  *Arlington, Texas*
- Developing Visualization module to visualize results of big data and of analyzed data.

**Software Engineering Intern**  **June 2022 – August 2022**
*Securonix*  *Dallas, Texas*
- Designed, developed and maintained Securonix's NextGen SIEM 2.0 Technology.
- Worked on Securonix's cloud to debug real-time customer issues and solve them.
- Worked on big data technologies KAFKA, SPARK, and MYSQL on the DataSource Project.

**Student Research Assistant**  **April 2022 – June 2022**
*UTA IT Lab, UTA*  *Arlington, Texas*

**Student Lab Assistant**  **Jan. 2021 – April 2022**
*Office of Information Technology, UTA*  *Arlington, Texas*
- Assisted in new lab installations or reconfiguration, as well as receiving and redistributing supplies.
- Guided Students and Professors with printing, logins, and various software related issues.

## EXTRACURRICULAM

**Engineering Student Council (ESC.UTA)**  **Feb. 2022 - Aug. 2022**
*Events and Marketing Officer*  *UT Arlington*