# SEAN TRAN

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Dependable and highly motivated Computer Science graduate currently pursuing a degree in Physics to deepen conceptual understanding of the universe and its underlying principles. Strong communicator with a keen awareness of user needs offers adaptability and effective collaboration in diverse environments.

## **EDUCATION**

The University of Texas at Dallas

\*\*Bachelor of Science in Physics\*\*

\*\*Bachelor of Science in Computer Science\*\*

\*\*Major GPA: 3.24\*\*

\*\*CALLS 8. TOOLS\*\*

## **SKILLS & TOOLS**

- Languages: Java, C++/C/C#, Python, Bash, Javascript, Powershell, SQL, XML, HTML/CSS
- Computer Tools: Kali Linux (WSL), Ubuntu, ChatGPT, MATLAB, Jupyter, Git, AWS, Firebase, MySQL, TradingView

#### PROGRAMMING PROJECTS

#### Blockchain Technology Implementation - OOP; Java

 Utilizes object-oriented programming principles to simulate the transaction validation process found in blockchain technology by implementing key features such as consensus, decentralization, and immutability

## Symmetric Key Algorithm Implementation - Network Security; Java, Firebase Hosting

- Restructured the Advanced Encryption Standard symmetric key algorithm recursively to emulate OpenSSL in a more user-friendly environment, resulted in more engaging class lectures and foundation for future topics
- Employs multi-use functions to increase runtime efficiency while displaying step-by-step breakdown to provide user with better understanding of encryption process

## Audit Report Generator for ECS - UTDesign Senior Capstone Project; C#, Powershell, AWS EB

- Led a team of 4 in developing a program to automate audit report generation for ECS Graduate Advising at UTD, extensively increasing initial process efficiency by 250% and future modifications by an even larger amount
- Designed and implemented a modular architecture utilizing object-oriented principles, to divide the project into four crucial components, allowing for efficient collaboration, future scalability and streamlining final integration process
- Created custom data parsing algorithms to handle various data formats and integrated with existing university student files using JSON serialization, ensuring seamless data retrieval and report generation

## Weather Parser – HTTP Content Parsing Script; Linux, Bash

- Employs a variety of text manipulation functions along with a Google search script to transform a single line of web server content into a detailed weather forecast for any given location
- Replaced Linux's default weather function with script that executed from local machine, resulting in a more personal and informative display that functioned with 100% reliability, contrary to the original function's intermittence

## **EXPERIENCE AND ACTIVITIES**

## **UTD Computer Security Group** – Competitive Team; Richardson, TX

Fall 2022 - Summer 2023

• Competed in solo/team CTF events tasked with securing a hidden text (flag), solving wide range of simple yet ambiguous security challenges including encryption, data analysis, and even GeoGuessr

## Investments and Securities at UTD - Co-Founder; Richardson, TX

Spring 2020 - Spring 2022

- Coordinated meetings and fundraisers to establish the club's on-campus presence after the 2020 lockdown, doubling the member count to over 400 new and experienced investors over the transition
- Authored bi-weekly technical analysis reports while offering supportive research positions to knowledgeable investors, introducing a multitude of sources for members to choose concepts and strategies suitable to them

The Golden Deli – Manager; Dallas, TX – www.goldendelidallas.com

Summer 2012 - Present

Ensures smooth operation of the restaurant while prioritizing excellent customer service to all guests

Work Eligibility: Eligible to work full time in the U.S. with no restrictions