

EDUCATION

University of Texas at Arlington	Arlington, Texas	(Expected) Summer 2024
<ul style="list-style-type: none">Bachelor of Science in Computer Science Coursework: Algorithms and Data Structure, Object-Oriented Programming, Operating Systems, Parallel Processing, Software Testing and Maintenance, Operation Research, Computer Networks, Information Security, Theoretical Concepts, Computer Graphics, Artificial Intelligence, Database and File Structure.		
Dallas College Brookhaven Campus	Farmers Branch, Texas	July 2019
<ul style="list-style-type: none">Associate of Science General Science		

WORK EXPERIENCE

Software Engineer, SDP	UT Arlington, Texas Link Poster	Aug 2022 – May 2023
<ul style="list-style-type: none">Collaborated with 4 members, shared knowledge, and contributed to sponsor's requirements at UTA Senior Design Lab.Documented, blogged, and presented sprints, SDLC, project poster to sponsor and made informative YouTube video.Designed and built low power and latency serverless smart-planter IoT for real-time stream and optimized sensor data.Integrated with mobile app to notify and monitor plant's environment to automate self-watering and refill feature.Adapted Agile, Git, and GitHub for CI/CD, deployed on MongoDB Realm, powered by Flutter and C++ following SDLC.		
Web Developer, REU	UT Arlington, Texas Link Project	July 2022 – Jan 2023
<ul style="list-style-type: none">Build dynamic and responsive full-stack website called MLN Dashboard for UTA IT-Lab with team of 5 membersIntegrated seamlessly with research GUI application to perform big data generation, visualization, analyzing, and logsBuilt RESTful API for CRUD application, user authentication and administrative management system to monitor system.Optimized 20 % performance increased when deployed on Nginx Linux/UNIX server for robust web application.Powered on CI/CD development with Git, Github, HTML, CSS, JS, NPM, Node, Express, Flask, Python and MongoDB		
Data Scientist, REU	UT Arlington, Texas Link Poster	Aug 2021 – Aug 2022
<ul style="list-style-type: none">Collaborated with 4 members, shared knowledge, result and contributed on research study at UTA Park-Mai Collab Lab.Developed Shakespeare Character-level Language Model based of Karpathy's Recurrent Neural Networks Char Model.Deep Learning Model was trained on Shakespeare's literature for 2000 iteration with 96 % accuracy.Powered by Google Cloud Collab, Python3, NumPy, PyTorch and Binary Cross-Entropy libraries to build the model.		

SKILLS

- Programming Languages:** C, C++, C-Sharp, JAVA, Python, Rust, Dart, JavaScript, Typescript, PHP, HTML, CSS, OPL
- Frameworks:** Rails, Bootstrap, Tailwind, Node, Express, React, Vite, Angular, Next, Three, Flutter, Flask.
- Data Science Tools:** PyTorch, TensorFlow, NumPy, MPI, OpenCV, scikit-learn, Jupyter, Google Collab, Pandas, MATLAB
- Others:** Git, GitHub, Azure, API, MPI, Figma, Junit, Excel, AWS, jQuery, NPM, YARN, JSON, XML, BASH, PowerShell.
- IDEs:** VSCode, Arduino, Android Studio, Sublime, IntelliJ, XCode, Eclipse, NetBeans, IBM CPLEX Studio, Overleaf
- Operating Systems:** Windows, Linux/UNIX, MacOS, Raspberry Pi, Android, iOS.
- Databases:** Firebase, Realm, MongoDB, PostgreSQL, MySQL, SQLite, GraphQL.
- Attention to Detail, Research and Analysis, Design Thinking, Problem-Solving, Communication, Prioritizing, Tech Blog.**

PERSONAL PROJECTS / OPEN-SOURCE

Mobile App Developer Founder	SplitPocket Releasing Soon	Recent
<ul style="list-style-type: none">Researched UI/UX trends and designed on Figma that solve user-friendly design of Spitwise UI and service.Prototyped the front-end and build back-end architecture according to the requirement and specification from design.Handled the teams of developer, designer and manager powered by Zoom, Notion, Scrum, Sprints, Adobe XD and Figma.		
React Developer	3D Blog Link	Aug 2023
<ul style="list-style-type: none">3D portfolio is a responsive and dynamic 3D object website for personalized blog build using Vite, Three.js, and React.Designed and Developed 3D design, wrote my professional blogs, accomplishment, achievement, goals and motivation.		
Flutter Developer Founder	PlantWays Link	May 2023
<ul style="list-style-type: none">Developed iOS and Android app powered by Flutter and Dart integrated with MongoDB API and push notification.Synced IoT data from MongoDB API using Realm Services with 30 % increase in performance on data transfer.Visualized Deployed IoT data with animated design for better UI/UX design which increased user experience.		

Software Developer	SuperCore Link	June 2023
<ul style="list-style-type: none"> Connected supercomputer Stampede on CLI command to test, program and solve parallelism computing problem. Programmed the Back Substitution and Ping-Pong algorithm to compute communication between 2 or more processor. Solved sieve of Eratosthenes and Simpson's Rule to computed speedup to find prime numbers on x no of processor(s). Visualized on graph, speedup vs no of processor, and communication vs no of processors using Pandas and Python3. Mentored by Dr. Ahmad to developed on C using MPI Libraries, and provided parallel processing resources, and access. 		
Cybersecurity Engineer	Secure Link	July 2023
<ul style="list-style-type: none"> Inspired by OWASP Top 10 to build saas cryptography website on Flask, MySQL, Python and cryptography libraries. Implemented Steganography on text, audio, image, and video to hide message which encodes on least significant bit. Encrypted plaintext and decrypted ciphertext using RSA, DES, and AES and respective public/private key(s) generation. Hashed using MD5, SHA-1, and SHA-2 hashing algorithm function to generate 64 and 256 bits hashing. Generated cryptographically random password on user request for up-to 32 bits length of password. 		
Game Developer	WebPoker Link	Mar 2021
<ul style="list-style-type: none"> Designed a Texas Poker website for 2-5 players to play powered by Java, HTML, and CSS on Agile development CI/CD. Developed, debugged and solved gameplay problem when player's turn is either to play or wait by using java-threads. Solved the problem of win(ner) by tokenizing each player on game by leveling hands while folded/other player watch. Documented and coded J-unit testing, Specification and Requirement system, UML design, Detail Design System. Collaborated with 4 members, shared knowledge, and documented the gameplay, rules and wrote official playbook. 		

LEADERSHIP ROLES AND AWARDS

Student Participant	Student Cluster Competition 2024	Sep 2023 – present
<ul style="list-style-type: none"> Mentored by Dr.Rao 4-HPC-nodes tested with 4000-watt power on benchmarks applications on competition. developed on C using MPI on utilizing resources access efficiently on CLI command to test, program and solve problem 		
Data Scientist, UTA Journal Club	Computational Neuroscience	Jan 2022 - present
<ul style="list-style-type: none"> Mentored by Dr. Maia with special interest team of 10 member which learns, develops, shares ideas, and collaborates. Solved Computational Neuroscience problem using python and data science libraries scikit-learn, NumPy, and OpenCV. 		
Student Participant	OurCS@DFW23, DCAdmin	Feb 2023
<ul style="list-style-type: none"> Mentored by Dr.Rao Utilized AWS server with Docker virtualization and containerization and overlay networks. Learned memory paradigms CXL, DRAM, persistent memory, datacenters networking/memory, microservices. 		
Student Participant	UNT Easy-Med 2022	Jun 2022 - July 2022
<ul style="list-style-type: none"> Mentored by Dr.Mohanty on embedded system and IoMT device, CPS, IoE, Blockchain, Cloud/Fog/Edge Computing, AI/ML, PUFchain/PUFs, RFID Security, Watermarking, Battery-less IoT, Tiny ML, Telemedicine, 5G and networking. Obtained research insights, mentorship, critical thinking, and Healthcare ethics and legal policy, and IoT device security. 		
Student Participant - 3st Place Winner	OurCS@DFW22, AirMon	Feb 2022
<ul style="list-style-type: none"> Mentored by Dr.Li on air monitoring embedded/IoT system with air particle sensor, GPS, Arduino Board and IDE, C++. Tested air quality around UTA campus and made heat map on quality of air using MATLAB, ThinkSpeak, and Excel. 		
Treasurer Officer	UTA Cycling Club	Aug 2019 - May 2022
<ul style="list-style-type: none"> Demonstrated leadership in fostering teamwork among cyclists, leveraging negotiating skills on membership benefit. Used Excel for monetary records and management for accurate, transparent, and organized bookkeeping and briefings. 		
Uniter Volunteer	UNICEF USA	Aug 2018 - June 2019
<ul style="list-style-type: none"> Founded Brookhaven UNICEF Initiative Club on 2018 with 4 others. Became the advocacy Officer Aug 2018 - June 2019 Focused on education and advocacy through seminars, presentations and special speakers and fundraised USD 700.00. 		
Recipient Student	TPEG Grand/Scholarship	2022-23
Recipient Student	HEERF Grand/Scholarship	2021-22
Student Participant- 1st Place Winner	Inter-Debate Club Competition	2018