

## EXPERIENCE

- Athlete Den** (early stage startup) New York, USA  
*Software Engineer* May 2024 - Current, Intern: May 2023 - Aug 2023
  - AI-based iOS Application Development:** Developing patent-pending iOS native mobile application for sports performance analysis by activity detection using computer vision algorithms and machine learning models.
  - Backend API Infrastructure and usage:** Architected backend cloud infrastructure for mobile platform. Implemented automated ML pipelines with automated labeling API for model training and label updates using GCP. Developed user data synchronization using Firebase.
  - App Deployment & Testing Pipeline:** Managed complete iOS development lifecycle including TestFlight publishing with Firebase Analytics for crash reporting and comprehensive application analytics. Established continuous integration and testing workflows for mobile app releases through github and AppStore.
- Samsung Research** Dhaka, Bangladesh  
*Lead Software Engineer* Jul 2018 - Aug 2022
  - Samsung Family Hub iOS:** Led development implementing secure layered API architecture for cloud data communication. Engineered robust database systems with multi-threaded data integrity protection, reducing concurrency related system crashes by 99%. Maintained unit test coverage for code quality.
  - Samsung Galaxy Buds Windows:** Architected application with secure communication protocols for firmware updates. Developed serialization protocols for secure byte stream handling, REST APIs for authenticated device communication, and FOTA (Firmware Over The Air) update system.
  - Technical Innovation & Documentation:** Created comprehensive technology knowledge base with 120+ curated technical articles. Evaluated security implications in patent documentation reviews.
  - Automated Testing & Quality Assurance:** Engineered automated security and performance testing framework for Samsung Notes desktop application. Implemented comprehensive logging of system vulnerabilities, I/O anomalies, and crash analytics.
- NJIT + Tennessee Tech** New Jersey, USA  
*Graduate Research and Teaching Assistant* Sep 2022 - May 2024
  - Healthcare Security Research:** Developed automated PHI/PII leakage detection systems in Android applications. Implemented STRIDE threat modeling framework adhering to HIPAA compliance.
  - SMS Phishing Detection Research:** Developed comprehensive Python-based SMS analysis system processing 1,000+ messages using BERT embeddings, BERTopic clustering, and UMAP dimensionality reduction. Engineered D3.js-powered graph-based visualization systems for threat intelligence analysis. Generated comprehensive datasets incorporating URLs, VirusTotal scores, LLM responses, and IP Quality Score data.
  - Software Static Analysis Research:** Contributed to research project focusing on static analysis of event-based systems. Fixed bugs and generated comprehensive technical reports.
  - Academic Teaching & Mentoring:** Managed laboratory sessions for 100+ students per semester in CS 103, CSC 2310 and CSC 1310. Designed programming assignments, conducted hands-on instruction, and graded examinations. Mentored undergraduate students in computer science fundamentals and cybersecurity principles.

## EDUCATION

- New Jersey Institute of Technology + Tennessee Technological University** 2022-2024  
*MS, Computer Science GPA: 4.00/4.00* Sep 2022 - Aug 2024
- Chittagong University of Engineering and Technology** 2013-2017  
*BSc in Computer Science and Engineering; GPA: 3.53/4.00* Mar 2013 - Nov 2017

## TECHNICAL SKILLS

- Languages:** Swift (Clean, Viper), UIKit, SwiftUI, Python, C, C#, JavaScript, SQL (MySQL), NoSQL (RealmDB), Shell Scripting (GCP Cloud Functions)
- Backend:** Google Cloud Platform (Vertex AI), REST APIs (Postman), Data and Machine Learning pipelines & APIs (pandas, scikit-learn, matplotlib, Pytorch)
- Development Tools:** Github Workflow - CI/CD, XCTest, WinAppDriver, TestFlight, SDLC-SOLID

## PROFESSIONAL RECOGNITION

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- **Samsung Research:** ICON of the Month (May 2019, Nov 2020), Outstanding Collaborator (2021).
- **Research Awards:** Best Paper at Eminence Award 2025 from Tennessee Tech College of Engineering (March 2025) and International Conference on Emerging Tech in Data Mining and Information Security (Feb 2018).

## RESEARCH PUBLICATIONS

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- Sanjari, S. M., **Shibli, A. M.**, Mia, M., Gupta, M., & Pritom, M. M. A., “SmishViz: Graph-based Visualization System for Smishing Threats,” *ACM CODASPY '25*, June 2025. (Acceptance rate: 20.9%) [Paper]
- **Shibli, A. M.**, Pritom, M. M. A. and Gupta, M., “AbuseGPT: Abuse of Generative AI ChatBots to Create Smishing Campaigns,” *IEEE 12th ISDFS*, San Antonio, TX, 2024. [Paper]
- **Shibli, A. M.** and Pritom, M. M. A., “Use of LLM-based Generative AI Chatbots for Smishing Attacks and Defenses,” *IEEE S&P '24 Poster*, San Francisco, CA, 2024. [Poster]
- **Shibli, A. M.**, Hoque, M. M., Alam, L., “Developing a Vision-Based Driving Assistance System,” *Springer AISC*, vol. 755, 2019. [Paper]

## INNOVATION & LEADERSHIP

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- **Patent Application:** “System, Apparatus, and Method for Analyzing Sports Performance Using Multi-Media Content” - Patent-pending AI-driven mobile platform for athletic training and performance analysis.
- **Research Impact:** Published in premier security conferences including IEEE S&P (top 17.8% acceptance rate) and ACM CODASPY (20.9% acceptance rate).

## VOLUNTEER

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- **STEM Education:** Managed practice tables for First Lego League Robotics competition at Tennessee Tech (Feb 2024). Hosted educational exhibition at University of Tennessee Chattanooga STEM Open House showcasing space education programs for K-12 students (Feb 2025).