# ARPITHA SHESHADRI BHAT

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## **EDUCATION**

# Northeastern University | Boston, MA

Expected June 2025

Master of Science in Information Systems

Relevant courses: Application Engineering and Development, Web Design/UX Engineering

#### **PES Institute Of Technology**

Bachelor of Engineering in Information Science

August 2021

Relevant courses: Data Structures and Algorithms, Object Oriented Programming, Computer Networks, Computer Programming

#### TECHNICAL SKILLS

Programming Languages: C, Java, Python, JavaScript, PHP Web Technology: React, NodeJS, HTML, CSS, jQuery, REST APIs

Framework: Spring

Databases: MySql, MongoDB

Rule Engine: Drools

# PROFESSIONAL EXPERIENCE

## PERFIOS SOFTWARE SOLUTIONS | Bengaluru, India

August 2021 - August 2023

# Software Development Engineer | Full stack web development

- Contributed to the Perfios's InsureTech mediclaim project, a claim management portal for digitizing and categorizing insurance claim data using React, Java, Spring Boot, and the Drools rule engine
- Replaced existing UI React code with Json schema-based rendering, enhancing the user interface for our project and adapted a Java library to optimize backend code, resulting in a significant reduction in data retrieval time
- Mentored interns to develop an end-to-end data management tool, fostering skill development and contributing to the team's capabilities
- Collaborated with cross-functional teams to coordinate and implement code changes for Proof of Concepts (POCs).
- Spearheaded a hackathon project focused on building a data lake using AWS services, including AWS Lambda, AWS Athena, Amazon S3, Amazon Kinesis, and Amazon OpenSearch Service.
- Received the "Pat on the Back Award" twice for outstanding performance and contributed to the team's "Circle of Excellence Award" for rapid product development in just two weeks

## PES RESEARCH CENTRE | Bengaluru, India

December 2020 - February 2021

#### Research Intern

- Worked on achieving end-to-end encryption for smart devices, with a focus on enhancing security
- Implemented homomorphic encryption using the HELib library and CKKS scheme to prevent Man-in-the-Middle attacks and denial-of-service attacks for fitness trackers
- Collaborated with a team of researchers to develop and test encryption solutions
- Demonstrated strong problem-solving skills and a deep understanding of encryption technologies during the internship

## **ACADEMIC PROJECTS**

# ML BASED INTRUSION DETECTION SYSTEM FOR WIRELESS NETWORK

March 2021 - June 2021

# (Python, Pandas, Scikit-Learn, Keras)

- Developed a neural network-based model to detect Denial of Service (DOS), User to Root (U2R), Probe, and Root to Local (R2L) attacks, and conducted a comprehensive performance comparison against various machine learning models
- Led the project by taking responsibility for the preprocessing phase, which included collecting a diverse and relevant dataset for intrusion detection, training and fine-tuning the dataset to align with project requirements, applying data filtering techniques to enhance dataset quality and suitability for the research

## TEMPLAR THREAT INTELLIGENCE PROJECT

October 2020 - December 2020

# (Python, Flask web framework, Beautiful soup for web scraping)

- Designed a system to provide insights into historical cyberattacks and predict potential future attacks by leveraging Machine Learning (ML) techniques and utilizing various cybersecurity tools
- Led the project and contributed to data acquisition by implementing web scraping techniques to collect information about cyberattacks from diverse sources
- Developed a user-friendly website to display the analysis of historical attacks and predictions for future attacks

# **CHARITY BLOCKCHAIN**

September 2020 - November 2020

## (React, Blockchain)

- Developed an innovative system to identify and approve legitimate organizations while detecting and preventing the incorporation of fake entities, leveraging Blockchain technology for robust backend security
- Led the coding and development efforts for the project's front-end, creating a user-friendly and intuitive interface
- Successfully integrated the project's website with a secure payment gateway, ensuring seamless financial transactions