Ahmed Taeha

Full Stack Software Engineer | ML/AI Engineer | Cybersecurity Specialist

Palo Alto, CA & D.C. | (408) - 439 - 9141 | Ataeha1@jh.edu | AhmedTaeha.com | linkedin.com/in/ahmedtaeha/ | github.com/ahmedtaeha

Skills

- **Frontend Development:** JavaScript, React, HTML5, CSS3, Bootstrap, Tailwind, Adobe XD, Figma
- **Backend Development:** Python, Java, C#, R, Spring Boot, Node.js, Angular.js, Express.js, MySQL, MongoDB, AWS
- **Algorithms:** Linear Regression, Logistic Regression, Decision Trees, Random Forests, Support Vector Machines (SVM), K-Nearest Neighbors, and Ensemble Methods
- **Machine Learning Libraries and Frameworks:** TensorFlow, Pytorch, Scikit-Learn, Keras
- **Data Engineering & Analytics:** Data Modeling, Validation, Processing, Hadoop, MapReduce, Pig
- **Tools and Technologies:** Microsoft Defender, Microsoft Azure, SIEM Tools, Intrusion Detection Systems, Firewalls, Endpoint Protection, Data Loss Prevention

Professional Experience

AI Research Engineer | CCVL Lab at Johns Hopkins Whiting School of Engineering *September 2024 - Present*

- Developed an AI model for medical imaging analysis with a minimal LLM interface for CT scan processing
- Designed 3D rendering capabilities from 3D CT scan inputs providing non-medical professionals an opportunity to visualize the CT scan
- Applied machine learning techniques improving diagnostic efficiency and minimizing manual annotations required for medical diagnostics by up to 20%

Full Stack Software Engineer | District Hut LLC (DistrictHut.com) *June 2020 - Present*

- Led and facilitated high-impact projects, demonstrating expertise in full-stack development

Project 1: Territory Tycoons (District Hut)

- Led the creation of "Territory Tycoons" - A 3D multiplayer game - TerritoryTycoons.com
- Grew to a few thousand active players, crafted with C#, Unity, JS, Figma, and AWS

Project 2: Hedge Hog (District Hut)

- Applied deep learning to predict stock prices, reducing stock analysis time by 70% (see details at districthut.com/Hedgehog.html)
- Implemented LSTM neural networks for time series forecasting to enhance accuracy by 25% in stock market analysis
- Incorporated reinforcement learning techniques to make trading decisions, improving efficiency and profitability of the trading bot by 10%

Project 3: Medical Clinic Database (Client Owned)

- Launched a Surgeon's Database, integrating advanced search capabilities that enabled the retrieval of key patient data in under 10 seconds; employed by 3 medical professionals within the clinic
- Streamlined patient management and medical records, transitioning from a paper-based system to a digital platform, resulting in a 15% reduction in backend administrative tasks (see districthut.com/MedicalClinic.html)

Project 4: Hotel Management System (Client Owned)

- Integrated a comprehensive hotel management platform that improved backend operations, resulting in a 20% reduction administrative tasks, and providing hotel owners with actionable insights for better decision-making (see districthut.com/HotelManagement.html)
- Implemented effortless booking, charging, and comprehensive backend management reducing backend operations by over 20% for the hotel

Education

Johns Hopkins Whiting School of Engineering

M.S. Cyber Security | *August 2024 – May 2026*

Coursework: Intro to Ethical Hacking, Intrusion Detection, Web Security, Foundations of Information Assurance

California State University, Sacramento

B.S. Computer Science | *Dean's Honors*

Offensive Security

Certificate, OSCP | *August 2024 – May 2025*

Personal Project Highlights

Machine Learning House Price Prediction Model

- Developed a machine learning model to predict house prices using Python, Pytorch, Scikit-Learn, and Pandas
- Preprocessed data by handling missing values, one-hot encoding categorical features, and normalizing data
- Engineered features, including interaction and polynomial features, and reduced dimensionality with PCA
- Trained Linear Regression and Random Forest models, optimizing hyperparameters through grid search
- Evaluated model performance using R-squared and MSE, achieving an R-squared of 0.85 with the Random Forest model

Web Application Security Testing Framework

- Developed a web application security testing framework using Burp Suite
- Configured Burp Proxy to intercept and modify HTTP requests, identifying vulnerabilities like XSS and SQL Injection
- Defined scope and used Burp Repeater for manual testing; ran automated scans for Directory Traversal and SSRF

Network Traffic Analysis with Wireshark

- Developed a network traffic analysis tool using Wireshark to capture and analyze data packets
- Configured capture filters to focus on specific IP addresses and protocols, improving the efficiency of data collection by 20%
- Analyzed captured packets using Wireshark's filtering options to identify potential network issues and security vulnerabilities
- Employed display filters and color-coding to isolate specific traffic patterns and detect anomalies