# umersalman

#### about

#### San Antonio, TX 78257 USA

(936) 463 8626

umer936@gmail.com umer936@utexas.edu umer936.com

github.com/umer936 fb://Umer936

## programming

## operating systems

Linux Android OS X iOS Windows

## software skills

SolidWorks Burp Suite ROS2 OpenCV Android Studio ADB/Fastboot

## education

#### 2016-2020 BS in Electrical and Computer Engineering - Fall 2020

The University of Texas at Austin

Tech Cores: Software Engineering & Design and Academic Enrichment

Minor: Business

#### **Embedded Systems Lab Keyboard:**

Created a USB 10-Keyless RGB Keyboard with Macro Recording using TM4C microcontroller https://youtu.be/fSX6dDx9jvY

#### **Entrepreneurship Senior Design (CTO):**

- Built a hardware/software platform to process physiological indicators in children
  - Designed PCB with galvanic skin response sensor, heart rate sensor, and microphone for wearable
  - Built Azure/Tableau web platform for healthcare professionals to view
- Formed a business plan and presented to biomedical industry experts

## **experience**

#### 2021-Now **Southwest Research Institute**

San Antonio, Texas

Computer Scientist

#### 2020 National Geospacial-Intelligence Agency (WFH)

San Antonio, Texas

Cybersecurity/Software Development Intern

- Developed a grammar assistance tool in JavaScript for Weekly Activity Reports
  - Corrects 6,000 writing mistakes to reduce the amount of time in editing process
  - Planned for use across NGA, such as in reports to Congress, etc
- Assisted in cyber-deception (honeypot "network devices") tool analysis

#### 2019 National Geospacial-Intelligence Agency

St. Louis, Missouri

Cybersecurity Intern

- Clearance: TS/SCI
- Assisted Detect and Incident Response teams
- Improved rulesets for Linux compromise detection
- Built PowerShell scripts to improve threat detection and analysis

#### 2018 **Visa Inc.**

Austin, Texas

Security Engineering Intern

- Created automated penetration testing suite using Burp Suite and Python to increase security while decreasing time in security testing stage
  - Tool tests Visa products & APIs for vulnerabilities such as XSS and Clickjacking
  - Learns from cybersecurity team to eliminate false positives

### **extracurriculars**

2017–2020 Texas Aerial Robotics (TAR)

The University of Texas at Austin

Founder and President

- Led a 40 person org. to compete in the International Aerial Robotics Competition
- Build and program cutting-edge, fully autonomous quadcopters
- Use computer vision and sensors, such as LiDAR and optical flow, to target and interact with moving ground robots in a GPS-denied environment
- Research drone swarming and drone control through human voice and gestures
- Develop abilities to interact with modules on moving reference frames (boats) 2mi away