

EDUCATION

Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)

Bachelor of Science in Computer Science and Technologies

Graduating in December 2019

GPA 95/100

WORK EXPERIENCE

Google

Kirkland, WA, USA

Engineering Practicum Intern - DoubleClick Search - Optimization Team: Health Detectors

05/17 - 08/17

- Developed and designed two health detectors for issues affecting bid strategies, improving the monitoring of bid strategy health and the bidding efficiency.
- Worked in backend using Java and Protocol Buffers, and in frontend with Angular Dart. Used Bazel as build tool.
- Studied the product's business logic and the advertisement industry. Fixed bugs and contributed with small features outside of the main projects.

ITESM

Monterrey, N.L, Mexico

Information Security Intern

01/16 - 05/17

- Found vulnerabilities in ITESM's institutional websites and exploited them methods such as XSS, SQL injection, among others.
- Automated vulnerability scans by developing Python scripts.

PROJECTS

Spydan

2016

A web spider that crawls shodan.io to get information about devices connected to the Internet and to identify vulnerabilities.

- Developed in Python using Scrapy, a module for web scraping.
- Retrieved used services, open ports and possible vulnerabilities from a specified network's servers and devices, allowing the identification of several vulnerabilities such as open FTP ports and outdated software.

Botzilla

2017

A Telegram chatbot that answers frequently asked questions for sales employees of a company along a dashboard with statistics related to the questions the chatbot receives. Winning hackathon project at HackMTY.

- Used Watson for NLP, PHP and Python for backend and JavaScript for frontend.
- Implemented Telegram's API and the connection with Botzilla's backend.
- Developed part of the frontend using amChart.

TesseractCats

2015

A multiplatform desktop application that extracts personal information from a passport's image based on it's alphanumeric key.

- Developed the backend in Java.
- Used Tesseract, Google's OCR engine to extract the passport's text.

AdminLogin

2016

A script that finds the administrator or login page given a URL or IP.

- Developed in Python.
- Used a dictionary of common paths that lead to the login or administrator page.
- Identified possible sites vulnerable to brute force attacks..

JoJo

2016

Small framework to scan Joomla! websites for vulnerabilities.

- Developed in Python.
- Created 3 modules: CMS detector, vulnerability scanner using joomscan (an existing script for vulnerability scanning), and result filter for better analysis.
- Assessed the status of ITESM's Joomla! sites.

SKILLS

AWARDS

PROGRAMMING LANGUAGES

2 years	Intermediate	C++
2 years	Intermediate	Java
4 months	Beginner	Python
3 months	Beginner	Dart

TECHNOLOGIES & MISC

Javascript, Shell, Protocol Buffers, Bazel, *nix, HTML, CSS, Git, Nessus, Metasploit, Design Docs.

- HackMTY 2017 Sigma's Challenge Winner Project.
- ITESM's Academic Talent Scholarship.
- Mention of Excellence in Prepa Tec CEGL (High School)