**Avi Sinha**

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**Software Developer / IT Analyst Profile**

Analytical and knowledgeable **Developer** and **IT Analyst** with related education, training, and technical certifications for designing secure and sophisticated networks/cloud infrastructures and deploying SDLC principles for designing efficient and scalable coding that addresses urgent, emerging needs. Working towards both Bachelor / Master’s degrees concurrently.

Southern Methodist University, Dallas, Texas

**Bachelor of Science in Computer Science, Security Specialization** (May 2019)

*~ Cumulative GPA: 3.65 / Major GPA: 3.85*

**Master of Science in Computer Science, Data Science Specialization** (May 2020)

# Skills/Certifications

IT Certifications: CompTIA Security+, Network+, Cloud+, (CCAP) Cloud Admin Professional, (CSCP) Secure Cloud, Professional, Trained in AWS Cloud, SAP, Microsoft Office Professional (Excel, Word, PowerPoint, Outlook)

Computer Science Skills:

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| --- | --- |
| *Languages:* | **C++, Java, Python, Ruby**, JavaScript, SQL(PostgreSQL, MySQL), Assembly Language, C, MATLAB, R |
| *Environments:* | **Git (GitLab and GitHub)**, **Linux (Bash)**, Windows, Kali, Jupyter, Agile Process, Test-Driven Development, Docker, Salesforce API |
| *Networks:* | TCP/IP, VPN, VLAN, DHCP, OSI, IP Routing, Virtualization Software, Switches, Firewalls |

Related coursework: Networks and Data security, Software/Algorithms, Machine Learning, and Database Management.

# Career History

Coordinated development and coding for numerous projects. Lead project teams, assign tasks and work with peers to meet deadlines. Leveraged programming skills to complete tasks. Authored and presented final projects for peer and faculty review. Tutored peers in best design practices.

**Work Experience:**

* *ORM Technologies (Clients: Trend Micro, Entrust, ProPath, Zix) (05-08/2018)*

As a Full Stack, Ruby on Rails developer, customized web application interfaces for clients. Made optimal design decisions for the displaying, RSPEC testing and data mining of predictive analytics. Queried data was used to automate marketing and sales decisions.

**Selected Projects (**https://github.com/avirajs):

* *Intrusion Detection for IOT network using Neural Networks (Python):* Analyze network traffic data of IOT networks and created a custom multilayer neural network that is trained, validated and tested for use. Fingerprinting techniques used can be useful for segmenting off the infiltrated parts of the network. This model would be deployed in a variety of business environments that require IOT for either tracking or monitoring of data in various geographic locations.
* *Advanced PDF Search Engine (C/C++):* Devised a command line search engine tool capable of advanced set notation queries and relevancy ranking by TD/IDF algorithm; decoupled storage of inverted indices; user friendly history, bookmarks.
* *SPACE Explorer Robot (Java):* Utilized robotics expertise to design a rover that navigates rough terrain and gathers soil, air moisture and temperature sensor data with less than 5 % error at the SMU Final Design Show.

**Associations/ Awards:**

* *Cyber-Security Team:*Active member in a Nationally Competitive team. Participates in Collegiate Cyber defense competitions
* *IEEE:* Member of Institute of Electrical/Electronics (IEEE) Community; various networking in leadership events.
* *AWARDS:* Discovery Scholar / SMU Dean’s Scholar / Recipient of HU Lee Taekwondo National Scholarship  
   National AP Scholar/ Perfect Scorer in Math and Chemistry