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## PROFESSIONAL EXPERIENCE

Programming Languages: **Python, C, Java**

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### Technical threat intel, intern      FireEye: Mandiant Intelligence      May '20 – August '20 (Remote)

- Triaged nation-state malware as a part of the Cyber Espionage team in intelligence services using static and dynamic malware analysis techniques with tools such as IDA, Ghidra, Ollydbg and Wireshark.
- Modelled threat intelligence based on attacker attribution and malware analysis while working with the most senior technical reverse engineers on analysis / reverse engineering tasks, collaborating with other technical and threat analysts on joint intelligence reporting.

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### Graduate research assistant      Johns Hopkins University      Sept '19 – May'20 (Baltimore, MD)

- Developed content and codebases for Cisco sponsored research: CryptoDoneRight based on crypto working on Markdown codes, web templating / development and cryptography concepts for content generation.
- Created code review analysis tool based on control flow graphs, data flow diagrams and ASTs for node.js apps

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### Cybersecurity Analyst      Ernst & Young (EY)      June '17– July '19 (Mumbai, India)

- Slashed the average turn-around time required for static analysis security testing (SAST) of mobile applications based on OWASP Mobile Top 10 by 40% through developing python and regex-based tool.
- Achieved an efficiency of 70% for monitoring and managing the workflow of public & internal applications of several Fortune 500 enterprises, deploying DevSecOps pipeline and conducting periodic VAPT assessments.
- Designed system architecture for cloud (AWS /Azure) based deployments of commercial grade apps.
- Manually achieved secure code reviews of 250+ applications discovering potentially 1000+ security issues.

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## EDUCATION

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### Baltimore, MD, USA      Johns Hopkins University      Fall '19 – December '20

- Master of Science in Security Informatics (Cybersecurity), Dec 2020. GPA: 3.96/4.0
- Graduate coursework: Software Vulnerability Analysis, Security & Privacy in Computing, Cloud Computing Security, Network Security, Ethical Hacking, Critical Infrastructure Protection, Cryptography, Global Trends

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### Mumbai, MH, India      Mumbai University      July '13 – May '17

- Bachelor of Engineering in Information Technology, May 2017. GPA: 3.7/4.0
- Undergraduate coursework: Data Structures & Algorithms, Database Management Systems, Systems & Web Security, Big Data Analytics, Computer Organization Architecture, Object Oriented Programming

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## TECHNICAL EXPERIENCE - PROJECTS

- **Secure, real-time drug delivery monitoring for neurologic pathology: (2020)** Created threat models, security policies and CI/CD pipeline for development activities as DevSecOps instillation. Worked with a team of doctorate level researchers and professionals to create secure lightweight protocol on top of Bluetooth stack.
- **[My Robot is Flawless, Right? \(Autonomous Vehicle Security / Machine Learning\) \(2019\)](#)**: Researched and conducted red team exercises in an effort to automate vulnerability exploitation and pen testing using hill climbing techniques to successfully discover potential flaws in autonomous vehicle simulation on TurtleBot3.
- **[Decentralized Firewall for Malware Detection \(Blockchain / Machine Learning\) \(2019\)](#)**: Developed an prototype as an alternative more durable solution to traditional firewalls (more predictable) and intrusion detection systems using blockchain technology along with autoencoder based Deep learning techniques.

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## ADDITIONAL EXPERIENCE AND AWARDS

- Creative Red Teaming and Malware Analysis certifications from Mandiant Intelligence Services.
- Coursera certification from Google cloud – Google Kubernetes, Cloud Identity, Core Fundamentals, Crypto
- Spotlight Award for Ace Collaborator, Client Champion (EY)
- EY Udemy Certification:(Puppet, Ansible, Salt, AWS Solution Architect, Tableau)
- Developed Internal Tools and Websites with Agile Development practices, with experience of over 4+ years.

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## TECHNICAL SKILLS

**Languages / Tools:** Python, C++, Ansible, Go, Puppet, Chef, YARA Burp, IDA, Ollydbg, Docker, SQL, Kubernetes, Wireshark, Metasploit

**Techniques:** Malware Analysis, Cloud Security, System Architecture Design, Malware Analysis, Reverse Engineering, Application Security, OWASP Top 10, Threat Modelling, Penetration Testing, Secure Code Review, Infrastructure Security, Network Traffic Analysis