MANIKANT SINGH

Second Year Post Graduate

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EXPERIENCE

Application Engineer (Oracle India)   Jul'16 - Jul'19

- Worked closely with product strategy team to timely deliver enhancements.
- Fixed code bugs in the application's backend, frontend and business logic.
- Handled 24x7 high severity customer's critical issues and delivered patch sets and hot fixes.
- Developed, maintained and enhanced automated database restoration tool.
- Managed internal team database server.

RESEARCH

Cyber Security Educational Framework   Aug'20 - Present

M.Tech Thesis | **Guide:** Prof. Manindra Agrawal

- Currently developing framework to quickly set up virtual environments for cyber security training.
- Auto grade students based on the attack they performed successfully.
- Map attack performed by student with MITRE ATT&CK knowledge base.

COURSE PROJECTS

Secure File System   Aug'19 - Sep'19

Computer System Security | Prof. Pramod Subramanyan

- Designed and implemented a secure file storage to keep files safe on malicious server.
- Designed an architecture of a system to maintain the Confidentiality, Integrity and Availability.

Malware Detection Static and Dynamic Analysis   Feb'20

Malware Analysis and Intrusion Detection | Prof. Sandeep K. Shukla

- Generated static and dynamic analysis report for given software.
- Based on the reports generated devised two machine learning techniques to classify software as Malware or Benign.

Load Balancer   Sep'19

Software Architecture | Prof. T.V. Prabhakar

- Designed and implemented a website to distribute load to different backend servers depending on the type of operations performed.
- Backend servers were created and hosted using Docker.

Web-Security Exploitation   Oct'19

Computer System Security | Prof. Pramod Subramanyan

- Attacked specially designed websites with different security loop holes and security measures.
- Used Cross Site Scripting (XSS), Cross Site Request Forgery(CSRF), SQL Injection exploitation techniques to attack website and gather sensitive information.

Ionic Framework Base Android App   Oct'19

Software Architecture | Prof. T.V. Prabhakar

- Developed an android app using IONIC framework instead of pure Android.
- Application let user click and view photo, record and play audio and videos.

EDUCATION

🎓 **M.Tech. CSE | CPI - 9.0/10**
Indian Institute Of Technology Kanpur
📅 July 2019 – Present

🎓 **B.Tech. CSE | CPI - 7.22/10**
National Institute of Technology Jaipur
📅 July 2012 – May 2016

AISSCE (CBSE) | Percentage - 85.4 %
Kendriya Vidyalaya Patiala
📅 2012

AISSE (CBSE) | CPI - 9.4/10
Kendriya Vidyalaya Patiala
📅 2010

TECHNICAL SKILLS

Languages:

| Java | C | SQL | Python |

| Golang | JavaScript | Vue.js |

Software and Platforms:

| Linux | SoapUI | Postman |

| SQL Developer | Weblogic |

| SpringBoot | REST API |

CERTIFICATIONS

✹ **CDT Oracle Database 12c: Introduction to SQL**

✹ **CDT UNIX and Linux Essentials Ed 1**

OTHER PROJECTS

Database Restorer (Oracle)   2017-18

- Developed a tool to automate the process of customer database dump restoration.
- Implemented REST API's and Cron Jobs to automatically pickup dump for restoration uploaded on (OCI) Oracle Cloud Infrastructure.

Data Integrity Tool (Oracle)   2019

- Worked on a web portal which detects data discrepancies in the application.
- Implemented the frontend using Vue.js

SCHOLASTIC AWARD

- First Prize In Intra-College Competition for website (About Jaipur)