

Saksham Aggarwal

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EDUCATION

University of California, Irvine | Irvine, California

Sep 2021 - Dec 2022

Master of Computer Science

GPA : 3.9/4

- Courses : Principles of Data Management, Introduction to Artificial Intelligence, Data Structures, Computer Security, Advanced Problem Solving

Vellore Institute of Technology | Vellore, India

Jul 2016 - Jul 2020

Bachelor of Technology – Computer Science and Engineering with specialization in information security

TECHNICAL SKILLS

Programming Languages: C/C++, MYSQL, Python, HTML, CSS

Tools: Android Studio, Wireshark, Git, PhpMyAdmin

Key Skills: Networking, Monitoring, Linux systems, Information security, Data Structures and Algorithms.

WORK EXPERIENCE

Software Engineer at Wipro Limited, Hyderabad, India

Sep 2020 - Aug 2021

- Owned monitoring stack in Apple Academy at Wipro. Compared Grafana and Tableau to propose a more efficient data visualization and alert generation platform.
- Received Industry training and mentored new joiners in C++ and Python.
- Provided SAP solutions for more timely and efficient resolution of customer raised tickets, as part of the support team.

Intern at Nuclear Science Center (IUAC), Delhi, India

May 2018 - Jul 2018

- Captured real time data by Troubleshooting over Ethernet in **Wireshark**. Analyzed captured data and successfully detected faulty servers triggering false alarms in lab.
- Collected data from different **cryogenic sensors** interfacing over ethernet and uploaded it on **IBM Bluemix Watson** platform with **python** sensor gateway to analyse temperature variance using cloud features.

RECENT PROJECTS

Fruit Sortation System Using Deep Convolution Neural Network (Python)

Nov 2019 - June 2020

- Implemented fruit sortation system utilizing **Fruits-360 dataset** for assessment and **Google's inception V3 Model** for fruit recognition.
- Used fruit shape and shading for quality detection based on difference in pixel values (**RGB difference**). Average accuracy on test set: 92%.
- Detected quality only by setting upper and lower limit of RGB values(using RGB value calculator) and calculated ripeness based on colour area percent.

Image Steganography Using RSA (Python)

Jul 2018 - Nov 2018

- Developed image **steganography** - **Least Significant Bit (LSB)** technique with **RSA (Public-Key Cryptosystem)** encryption over secret message for enhanced security and prevention from steganalysis.
- Abused the fact that human perception cannot detect minor changes in pixel values. For secure data transmission, encrypted message before embedding it into image.
- Modules used : Cv2 - For image processing; Numpy – For handling array processes and numerical values; Crypto – For encoding/decoding using RSA.

Blood Bank Website

Nov 2017 - Apr 2018

- Created Blood bank System to connect donors and receivers in a more efficient way adding transparency in field. The database is managed by an Administrator.
 - System provides donors power to sign up and access all requests posted by recipients directly without any middleman.
- HTML, CSS, JAVASCRIPT, PHP, WampServer and MySQL.**

Hangman (C++ game)

Nov 2016 - May 2017

- Implemented popular classic Hangman game. User tries to guess secret word in fixed number of guesses and hanged otherwise.
- Complexity level of the word is determined based on category and level opted by player.

Basic Android Projects

Built Calculator, Compass, Spanish to English language convertor, Court Count apps in Android Studio using XML and JAVA.

RECENT ONLINE COURSES

- AI for Everyone from Coursera, by DeepLearning.AI.
- DS & Algorithms in C++ course from Coding Blocks, Delhi.
- Introduction to Cyber Attacks from Coursera, by New York University Tandon School of Engineering.
- Introduction to Cybersecurity for Business from Coursera, by University of Colorado.