VATSAL VERMA

3rd Year Undergraduate

Department of Computer Science and Engineering

Academic Qualifications

Year	Degree	Institute	CGPA
2018-2022	B.Tech	SRM Institute of Science and Technology	8.89/10

Experience

• Winter Software Developer Intern

(Nov'19- Jan'20)

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Noida, India

Sintech Technologies Pvt. Ltd,

- Developed Sintech Technologies App for both Andriod and IOS.

- Used Flutter framework for frontend, Firebase for Database and consumed Google cloud APIs.

• Software Engineering Internship

(May'20- July'20)

JP Morgan Chase & Co.,

- Worked on mini project with hypothetical data about stocks to help traders identify potential trade strategies.
- Also learned about JPMorgan Chase's own open sourced software called Prespective which is used for data visualization and analysis.

Key Projects & Workshop

• ALzHI App [link]

(Feb'20)

Remote

- It can predict if a person is suffering from **Alzheimer's disease** with **71.5 percent** accuracy rate.
- Used Flutter Framework and Firebase for Database and Authentication.
- Malicious URL Detection using ML $\|Prof.ShivangiTygai[link]\|$

(Jun'20)

- Used machine learning for detecting malicious URLs using text & host based features with 95 percent accuracy.
- Implemented algorithms like Neural Networks, perceptron in python and used libraries for Support Vector Machines for the classification problem with supervised learning.
- Fake News Detection [link]

(Nov'20)

- Development of an application which checks factual correctness of a given news article.
- Combined image and text search is an area which I plan to focus on. To verify this combination, it can be searched on trusted sites and reputed news sources.
- Also, we plan to handle automatic detection of the fake videos.
- Sorting Algorithms Visualizer [link]

(Auq'20)

- Developed a python simulation/visualiser for various sorting algorithms such as QuickSort, MergeSort, HeapSort for better understanding and comparison among them.
- Used MatplotLib toolkits and packages for creating static, animated, and interactive visualizations of shifting, partition, heapify, merge, swap, insertion and other instructional operations of sorting algorithms.
- Target Image to video conversion(Augmented reality) [link]

(Dec'20)

- We have create an augmented reality (AR) app using Unity and Vuforia- a popular game development engine
- This AR application allows you to define and recognise objects in the real-world and overlay additional/alternative content on top of them when they are viewed through a mobile phone or tablet camera screen.
- Ethical Hacking Workshop (IIT BOMBAY)

(Sept'18)

- We understood the mechanism behind the phishing websites and to dive deeper and analyse created one our self.
- It's all about how to secure your cyberspace and system from attacks and deeper research into it.

Positions of Responsibility

• President of Codechef-Chapter SRM

(Sept'20-Present)

- Head of Codechef chapter, which is programming clubs run and maintained by the official chapter leaders and mentored by CodeChef a competitive programming site.
- Aim of this chapter is to empower core members to build a robust Competitive Programming culture on campuses and
 to help students become better problem solvers fostering learning and professional development.
- Our team organizes events, meetups, and speaker sessions on campus to raise awareness, hosting various contests and competitions to facilitate learning and conducting programming workshops and doubt-sessions for better learning.

• Core member of International Organisation of Software Developers Chapter

(Oct'18-Present)

- India's leading **Open source development** based organisation.
- Mentored 100+ students in understanding basics of GitHub and web app development via series of sessions.
- Helped students to understand open source development, took many events and sessions for the Introduction of open source development.
- One of the biggest students Open source organization in India and helps the students to get started with the open source development and contributions to open source platforms.

• Member of Computer Society of India SRM chapter

(Aug'20-Present)

- CSI provides a research platform through conferences, summer schools, research workshops and promotes novel research and
 its scientific applications in the field of sustainable science across the world.
- I provides the students with research opportunities available in the university and outside university.

• Sports Club SRM

(Aug'18-Present)

- Managed Institute Table-Tennis Playoffs, an SRM Khel tournament spanning over 4 days and catering to 72 participants.
- Carried out live online showcase of a sports event for the first time in the institute thereby setting a trend for the future events.

Technical Skills

- Programming Languages: C, C++, HTML, LATEX, Python, Flutter, Dart, MATLAB
- Software and Libraries: GNU Octave, Git, VS Code, Tensor Toolbox, Anaconda ,Keras ,Pandas ,Unity, Arduino
- Operating systems: Windows, Mac OS, Linux

Scholastic Achievements & Honours

- Selected for Global Entrepreneurship Boot Camp in Kuala Lampu, Malaysia among 200 Delegates around the globe.
- Got Scholarship to Attend Open Source Summit and Embedded Linux Conference Europe 2020 by Linux Foundation.
- Core Team member of IOSD(Inter national Organization of Software Developers) Chapter SRM (Aug'18-Ongoing)
 Elected as President of Codechef Chapter among 645 students in department of Computer Science and Engineering.
- Secured All India Rank 40,33 &41 in International English Olympiad, National Interactive Science Olympiad & National Interactive Maths Olympiad.
- Secured International Rank 55 & 46 in National Interactive Maths Olympiad(Level-2) & International English Olympiad(Level-2)

Design and Analysis Of Algorithms (+Lab)

• Secured a Global Rank 14 on CodeChef August Challenge 2020.

Key Courses taken

Data Structure and Algorithms (+Lab)

Data Stractare and Higorithms (+ Eas)	Design and Thierysis of Theoriem († Eas)
Biology	Introduction to Computing
Probability and Statistics	Linear algebra and Differential Equations
Operating System (+Lab)	Advance Programming Practices (+Lab)
Software Engineering and Project Management(+Lab)	Computer Architecture(+ Lab)
Calculus and Linear Algebra	Engineering and Graphics Design(+LAB)
Programming for Problem Solving	Analog and Digital Electronics
VLSI Laboratory	Communication Laboratory
Analog Circuit Laboratory	Basic Electronics Lab
Semiconductor Physics	Software Engineering
Biomedical Signal Processing	Design Laboratory
Management Principles	Analytical and Logical Thinking Skills
Chemistry(+LAB)	Analytical and Engineering Graphics and Designs
Social Engineering	Civil and Mechanical Engineering Workshops
Computer Networks *(ongoing)(+Lab)	Formal Language and Automata *(ongoing)

Extra-Curricular Activities

- Secured **3nd** position out of 1000+ students in Decode the code 2020 by ISTE.
- Problem setter of Competitive Coding Club in College.
- Dedicated 80 hours of community service under National Service Scheme (NSS)
- Volunteered to raise awareness in Narora Atomic Power Station (NAPS) Township arranged by the Station Director, NAPS
 regarding higher education and got senior secondary students of AECS Narora acquainted with JEE and the level and rigour of
 studies required to crack it.
- Organized several Tech events during **Technical Fest Innovate** of SRM.
- Codechef rating: 3 Star [vatsalv_123]
- Conducted an interactive Competitive Coding workshop for all the first-year students of the hostel.
- Rated **5 star** on Hakerrank. [VATSAL_VV].
- Soccer team captain (of Atomic Energy Central School, Narora) from VIth. to Xth. Std.
- Mentored juniors at my undergraduate university to achieve better grades and helped them in different subjects to achieve their goals.
- Learning the French Language, completed 100 hours with A+ grade