Tanmay Agarwal

Full Stack Developer | ML Developer | Python Engineer

tanmayresume.com

MSCS, Columbia University

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### **EDUCATION**

New York, NY

• Columbia University

Master of Science in Computer Science

• Vellore Institute of Technology

Bachelor of Technology in Computer Science Engineering, CGPA: 8.7/10.0

Vellore, India

2021 - 2025

Sir Padampat Singhania School

 $Senior\ Secondary,\ CBSE,\ 85\%$ 

• Sir Padampat Singhania School

Secondary, CBSE, 90%

Kota, India

Kota, India

2018

EXPERIENCE

### • SURYAA CHAMBALL POWER LIMITED

Jan 2025 - Present

Kota, India

2025 - 2027

 $Data\ Analyst$ 

- Engineered an data analysis framework that reduced manual processing time by 40% and improved data accuracy by 25%

- Implemented machine learning algorithms to build predictive models for power loss estimation, increasing accuracy by 15%
- Architected real-time Power BI dashboards that enabled stakeholders to identify anomalies and make data-driven decisions, resulting in a 12% reduction in operational costs

## • Pro Start Me Technologies Pvt. Ltd.

 $Aug\ 2023$  -  $Sep\ 2023$ 

SEO and Generative AI Intern

Surat, India

- Developed an automated reporting tool using Python and AI techniques that decreased reporting time by 54%
- Conducted comprehensive competitor analysis that resulted in 2-position improvement in SERP rankings for key client websites
- Optimized meta titles and descriptions across 15+ websites, yielding a 30% increase in organic search click-through rates

• CodeClause

Python Development Intern

Remote

- Delivered 4 complex Python projects within a compressed one-month timeline.s
- Refactored legacy code base to reduce code size by 32% while maintaining functionality.

### PROJECTS

•3D Portfolio Website

Nov 2023 - Feb 2024

 $Self\ Project$ 

tanmayresume.com

- Architected a fully interactive 3D website that showcases technical projects with immersive user experience, resulting in 30% longer user engagement
- Integrated React, ThreeJS, NodeJS, Express, and EmailJS to build a performant application with 98% lighthouse performance score

### •Full Stack Social Media App - Snapgram

Dec 2023 - Apr 2024 snapgram101.netlify.app

Self Project

- Engineered a full-stack social media platform with secure authentication, real-time updates, and sharing capabilities
- Implemented React JS, Appwrite, Tailwind CSS, and React Query to create a responsive application that handles 500+ concurrent users

### •100 Day 100 Projects Challenge

Nov 2023 - Feb 2024

 $Self\ Challenge$ 

GitHub Repository

- Executed 100 Python projects in 100 days, accumulating over 600 coding hours and strengthening algorithm design skills
- Developed competencies in data structures, competitive programming, API integration, and data manipulation through daily practical application
- Leveraged key Python libraries to solve real-world problems, resulting in a portfolio that demonstrates versatility and technical growth

# SKILLS

- Programming Languages: Python, C/C++, JavaScript, HTML, CSS, Java, SQL
- Tools and Frameworks: React, Node.js, Express.js, MongoDB, Three.js, Power BI, Jupyter, Git, Visual Studio Code, Vite
- AI/ML and Data Science: Machine Learning, NLP, Data Analysis, TensorFlow, PyTorch, scikit-learn, Pandas, NumPy, Claude, GPT
- Web Development: Frontend Development, Backend Development, RESTful APIs, Responsive Design, Tailwind
- Soft Skills: Problem Solving, Leadership, Cross-functional Collaboration, Project Management, Communication

## **CERTIFICATIONS**

- $\bullet \ \, \textbf{Software} \ \, \textbf{Engineer} \ \, \textbf{Certificate} \, \, \textbf{-} \, \, \textbf{Hackerrank} \\$
- Career Essentials in Software Development Microsoft and LinkedIn
- Career Essentials in Generative AI Microsoft and LinkedIn
- Introduction to Google SEO Coursera and Google
- AWS Academy Cloud Foundations AWS Amazon Web Services
- Cloud Digital Leader Google Cloud

### LEADERSHIP EXPERIENCE

•Technical Project Head, SCRS Chapter, VIT Vellore	Apr 2023 - Jan 2025
•Event Coordinator, Blockchain, VIT Vellore	Mar 2023 - Apr 2023
•Core Member, Google Developer Student Clubs, VIT Vellore	Jan 2023 - Apr 2023
•Core Member, ISTE Chapter, VIT Vellore	Jun 2022 - Jan 2023

# **PUBLICATIONS**

• Designing Energy Aware Scheduling and Task Allocation Algorithms for Online Reinforcement Learning Applications in Cloud Environments: IEEE Transactions on Computational Social Systems [Link]

# ACHIEVEMENTS

•Freelancing, Successfully completed 4 web development projects for clients.	2024
$ \hbox{\bf -Competitive Coding}, \ Solved \ 600+ \ problems \ on \ CodeChef \ and \ 200+ \ problems \ on \ LeetCode. $	2023
•SIH Hackathon, Advanced to the national level in the Smart India Hackathon.	2023
•State Level Player, Represented district in state-level Chess and Tennis competitions.	2018

•International Olympiads, Multiple awards in International Mathematics, Science, and Cyber Olympiads. 2008-2020