

Vamshikiran Morlawar

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EDUCATION

Year	Degree/Certificate	Institute	CPI/%
2022-Present	M.Tech/Computer Science & Engg.	Indian Institute of Technology, Kanpur	8.86/10
2016-2020	B.E/Information Technology	International Institute of Information Technology, Pune	9.28/10
2016	HSC(XII)	Rashtramata Indira Gandhi College, Jalna	79.85%
2014	SSC(X)	Shri MS Jain English School, Jalna	96.60%

EXPERIENCE

- **Pepsico India** - Intern (Jun'23 - Aug'23)
 - Developed a system to visualize Pepsico's employee organizational structure across different hierarchical levels
 - **Applied insights from coursework in Big Data Visual Analytics**, effectively translating concepts into an impactful solution
 - Collaborated with cross-functional teams, delivered the project within the timeframe, and received positive feedback
- **Innocean Worldwide Europe, Germany** - Web Developer (Jun'22 - Aug'22)
 - **Collaborated with major brands Hyundai and Kia** to elevate design and user interaction through dynamic web modules
 - Built an interactive slider and questionnaire module enhancing **Hyundai's flagship Brand 3.0 Page**
 - Created a module letting users easily explore different car models for **Kia's Range Campaign Landing Page**
- **Techverito Software Solutions, Pune** - Consultant (Aug'20 - Mar'22)
 - Harnesses the power of comprehensive training to excel in **writing clean code** and **master Agile methodologies**
 - Played a key role in the successful revamp for a Canadian insurance client's website within a 3-month timeframe
 - **Earned recognition** from the client's manager for outstanding work, leading to positive feedback

PROJECTS

- **Feature-Rich Research Platform with Infrastructure Optimization** (M.Tech Thesis) (Mar'23 - Present)
Guide: Prof. Arnab Bhattacharya
 - Designing a platform hosting content in multiple languages, ensuring users can contribute and access content seamlessly
 - Developing to **handle high traffic loads efficiently**, ensuring optimal performance even during peak usage
 - Planned integration of **AI/ML** to enhance content discovery and assist writers in generating high-quality content
 - Developing the project as **an open-source initiative**, encouraging contributions, and fostering collaborative development
- **Insights into Customer Behavior and Business Strategies for Restaurant** (CS661A) | Prof. Soumya Dutta (Jan'23 - Apr'23)
 - Effectively utilized the Zomato Restaurants dataset to complete a project focusing on Visual Analytics
 - Translated **complex data into insightful visual representations**, including Bar Charts, Line Charts, Heatmaps, and Trees
- **Big Data Visual Analytics** (CS661A) | Prof. Soumya Dutta (Jan'23 - Apr'23)
 - Processed 2D uniform grid data in VtkImageData format, extracting cell details and visualizing them
 - **Executed advanced volume rendering** with Phong Shading after extracting 2D isocontours
 - Developed an interactive platform using Plotly and Jupyter Widgets for dynamic isosurface visualization and histogram analysis with real-time user adjustments
 - **Implemented random sampling** on volume data and reconstructed volume data from sampled points
- **Captcha Solver** (CS771A) | Prof. Purushottam Kar (Aug'22 - Nov'22)
 - Utilized **HSV model** to improve CAPTCHA text character detection by identifying background pixels in the image dataset
 - Implemented brightness-based thresholding for precise character-background separation to segment individual character
 - **Achieved 100% accuracy** in character classification by **training a multiclass SVM model** using flattened image data
- **The Code Corrector** (CS771A) | Prof. Purushottam Kar (Aug'22 - Nov'22)
 - Implemented dataset balancing techniques, such as SMOTE, to address data imbalance and detect code errors
 - Applied **classification methods**, including One-vs-All, Decision Tree resulting in improved program repair efficiency

SKILLS

- **Languages/Utilities:** C, C++, Python, Javascript, SQL, HTML, CSS, React, Node.js, Git, Agile
- **Libraries:** OpenCV, Numpy, Pandas, Scikit-learn, Plotly, Matplotlib, Apache Echarts

ACHIEVEMENTS

- Secured **All India Rank 343** in GATE CS 2022 out of 77,257 candidates
- **Overall Academic Achievement Award** 2019-20
- **Special Technical Category Award** 2019-20
- **Infosys Certified Software Programmer** 1922 selected among 62K+ applicants
- Selected for **Persistent Computing Institute(PCI) Winter School 2018** at Persistent Systems, Pune

POSITIONS OF RESPONSIBILITY

- **Teaching Assistant** Mathematics for Computer Science (CS201) (Aug'23 - Present)
- **Teaching Assistant** Fundamentals of Computing (ESC111/112) (Nov'22 - July'23)
- **Chairperson** at **ACM Student Chapter** and **ITSA** (2019-20)

COURSES

- **Postgraduate:** Program Analysis, Verification and Testing | Intro to ML | Big Data Visual Analytics Modern Cryptology | Blockchain Technology and Applications | Hardware Security for IoT | Sensing, Comm & Networking for Smart Wireless Devices
- **Undergraduate:** Problem Solving and OOPS | DBMS | Data Structures and Files | Design Analysis of Algorithm | OS