

Srinivas Nampalli

Date of birth: 15/05/2004 | **Nationality:** Indian | **Phone number:** (+91) 9346780823 (Mobile) | **Email address:** srinivasvarma764@gmail.com | **Website:** <https://bit.ly/3MjJEhl> | **LinkedIn:** <https://www.linkedin.com/in/srinivas-nampalli/> |

Address: 1-9-49/2/B, Beside sowmaya hospital, Ramnagar,Hyderabad,Telangana,India, 500020, Hyderabad, India (Home)

ABOUT ME

I am a passionate **Mechanical Engineer** with a growing interest in Artificial Intelligence, currently pursuing a **Minor in AI at IIT Ropar**. With hands-on experience in various engineering disciplines and internships at notable organizations like **Ford** and **GE Aerospace**, I strive to integrate cutting-edge technologies into practical solutions. As the founder of **AstraSrinix**, I explore the intersection of technology and innovation, sharing insights through content creation on topics ranging from engineering to AI. I am dedicated to continuous learning and eager to contribute to transformative projects in the tech space.

WORK EXPERIENCE

09/2024 – 09/2025 Ropar, India
STUDENT MINOR IN AI BY IIT ROPAR

- **Foundation Studies:** Engaged in fundamental coursework covering essential mathematical concepts and programming skills, focusing on Python for data science and AI applications.
- **Core AI Topics:** Explored advanced concepts in neural networks, natural language processing (NLP), and computer vision, gaining practical experience in developing AI models and algorithms.
- **Project-Based Learning:** Participated in hands-on projects involving the application of AI techniques, including data handling, robotics, and the Internet of Things (IoT), fostering problem-solving skills and innovative thinking.
- **Interdisciplinary Collaboration:** Collaborated with peers from diverse backgrounds to tackle complex AI challenges, enhancing teamwork and communication abilities.
- **Research and Development:** Conducted research on emerging trends in AI, staying updated on advancements and their implications across various industries.

02/2024 – CURRENT India
FOUNDER & TECH INNOVATOR ASTRASRINIX

- **Content Creation & Strategy:** Developed and curated engaging content related to technology, engineering, AI, and innovation, aimed at simplifying complex concepts for a wider audience across blogs and social media platforms.
- **Digital Product Development:** Created and marketed digital products, including e-books and tutorials, on AI, tech updates, and side hustle ideas for aspiring engineers and tech enthusiasts.
- **Brand Building & Marketing:** Established and grew **AstraSrinix** as a recognizable brand in the tech space, leveraging SEO, social media strategies, and audience engagement to drive traffic and build a loyal community.
- **Project Management:** Managed multiple content and digital product development projects simultaneously, ensuring timely delivery and high-quality output.
- **Industry Insights & Networking:** Kept up with emerging trends in AI and technology, using insights to drive content strategy while networking with professionals and industry experts to expand reach.

Website <https://bit.ly/3MjJEhl>

04/2024 – 05/2024 Remote
INTERN FORD MOTOR COMPANY

Main Activities and Responsibilities

- Conducted in-depth analysis of battery capacity across multiple chemicals, leveraging Excel to visualize complex data sets and identify performance trends critical to the development of electric vehicle (EV) batteries.
- Applied advanced data analysis techniques to assess the relationship between battery chemistry and capacity, supporting key decisions in EV design and optimization.
- Worked on tuning PID controllers for robotics applications, reviewing and enhancing existing Python code to improve system responsiveness and control precision.

- Delivered insights on how iterative updates to PID controller parameters influence robotic performance, contributing to enhanced system stability and efficiency in real-world scenarios.
- Gained proficiency in control systems, data visualization, and automotive engineering, directly impacting Ford's initiatives in electric mobility and automation.

10/2023 – 11/2023

INTERN GE AEROSPACE

Main Activities and Responsibilities

- Conducted a detailed analysis of alternative energy sources for the advanced concept engine program, evaluating their performance, sustainability, and impact on emissions reduction in aviation.
- Developed strategic recommendations on the selection of next-generation energy sources, delivering concise reports to senior engineers to support future propulsion innovations.
- Explored the relationship between aviation fuel alternatives and greenhouse gas emissions, contributing to the company's efforts in environmental sustainability and regulatory compliance.
- Analyzed the effects of bypass and compression ratios on turbine engine design, identifying trade-offs and performance optimizations to guide the development of cutting-edge propulsion systems.
- Created technical presentations for cross-functional teams, demonstrating expertise in turbine engine dynamics and helping to influence design decisions for future aerospace technologies.

01/06/2022 – 30/11/2022 Hyderabad, India

INTERN DEFENCE RESEARCH DEVELOPMENT LABORATORY

Main Activities and Responsibilities

- Gained hands-on experience in both traditional and advanced manufacturing processes, including CNC and manual operations, milling, lathe, EDM, grinding, and surface finishing techniques.
- Conducted in-depth research and trained on cutting-edge non-traditional machining technologies, optimizing precision and efficiency in manufacturing workflows.
- Specialized in advanced surface coating techniques to enhance component durability and performance under extreme conditions.
- Successfully developed and engineered a high-performance nozzle, integrating complex design principles with rigorous quality standards to meet project specifications.
- Collaborated with cross-functional teams in a high-pressure R&D environment, driving innovation in aerospace and defence components.

● **EDUCATION AND TRAINING**

09/2023 – 11/2023

PROFESSIONAL DIPLOMA IN MECHANICAL ENGINEERING European Open University

Website <https://www.academyeurope.org/>

06/2020 – 05/2023 Hyderabad, India

DIPLOMA IN MECHANICAL ENGINEERING TKR College of Engineering and Technology

Website <https://tkrcet.ac.in/>

06/2009 – 03/2020 Hyderabad, India

MATRICULATION The Mothers Integral School

● **PROJECTS**

Visualize battery capacity data and review Python code for a PID controller-Ford Motor Company

Analyzed the provided data to assess battery capacity for the three chemistries. Created Excel charts to visualize the data. Review the provided Python code for a PID controller, and then examined another example where the values are iteratively updated. I have written a summary explaining how these updates will impact the control of the robot.

Help guide the design of a next-generation propulsion system with the GE Aerospace team

I Compared and selected a new energy source for the advanced concept engine program. Generated a comprehensive list of alternative energy sources. Then drafted a short memo to our lead engineer with their recommendation. Created a technical presentation discussing the limiting factors related to bypass ratio and compression ratio to help guide my team in the design of a next-generation propulsion system.

Water Purification Using Reverse Osmosis and ultraviolet Radiation Process using Recycled products

The machine makes use of a reverse osmosis and ultraviolet radiation process to convert impure water to pure drinkable water. The system first allows user to pour salty water via a meshbased inlet where large waste like plastic granules or stones, weed etc gets separated and by reverse osmosis and ultraviolet radiation process without the use of any chlorine.this makes water purification at Low cost and available at low cost to all people.

CERTIFICATIONS

Matlab Onramp

Completed the MATLAB Onramp course, acquiring essential foundational knowledge in MATLAB programming. This certification equipped me with skills in data manipulation, visualization, and basic coding techniques. I developed proficiency in utilizing MATLAB's interactive environment for numerical analysis, algorithm development, and effective problem-solving, significantly enhancing my capability to apply MATLAB in engineering and data-driven projects.

AutoCad

Acquired proficiency in AutoCAD, mastering fundamental tools and features to effectively utilize its 2D CAD capabilities. Gained in-depth knowledge of various environments, including Sketch, Part, Assembly, and Surface, enabling the design and modelling of diverse products and services. This certification enhances my ability to conduct model and prototype testing cost-effectively, aligning with principles learned during my engineering degree.

Solidworks

Proficient in SolidWorks, a powerful CAD software utilized for the end-to-end development of mechatronic systems. Skilled in leveraging SolidWorks for comprehensive project planning, visual ideation, and 3D modelling. My expertise extends to conducting feasibility assessments and creating prototypes, ensuring efficient project management throughout the design process. This certification enhances my ability to deliver innovative engineering solutions and streamline product development.

Artificial Intelligence and Machine learning

Acquired a solid foundation in Artificial Intelligence (AI) and its practical applications in addressing real-world challenges. Developed a comprehensive understanding of key AI algorithms, including **Regression, Classification, Clustering, and Neural Networks**. Proficient in utilizing Python programming to design and implement basic AI models, enabling effective data-driven decision-making and predictive analytics. This certification enhances my capability to leverage AI technologies for innovative solutions in engineering and beyond.

Goethe-Zertifikat A1

An internationally recognized certification that validates foundational proficiency in the German language. This credential confirms my ability to understand and utilize basic everyday expressions, engage in simple conversations, and introduce myself effectively. Achieving the A1 level not only reflects my commitment to language acquisition but also establishes a solid groundwork for further studies and communication in German-speaking contexts, enhancing my cultural adaptability and global communication skills.

Ethical Hacking: Weaponization

This certification equips me with essential skills to understand and mitigate cyber threats. I have gained in-depth knowledge of the cyber kill chain, emphasizing the importance of proactive security measures. Key competencies acquired include:

- **Hacking Techniques:** Proficient in executing attacks using Word documents to exploit vulnerabilities.
- **VBA Scripting:** Developed scripting skills for automation and enhanced penetration testing.
- **Reverse Shells:** Familiar with various types of reverse shells for effective remote access.
- **Meterpreter Shell Usage:** Gained expertise in utilizing Meterpreter for advanced exploitation techniques.

This certification has significantly bolstered my ability to identify, analyze, and respond to cyber-attacks, ensuring robust network security.

DIGITAL SKILLS

Computer-Aided Design | Manufacturing Processes | Mechanical Design & Analysis | Data Analysis & Machine Learning | Prototyping & Testing | Statistical analysis. | Cloud-computing | Basic Web Development | Technical Documentation | Reporting | Digital Marketing | SEO Basics | Cybersecurity Awareness

● **COMMUNICATION AND INTERPERSONAL SKILLS**

Active Listening & Empathy

Exceptional ability to actively listen and understand the perspectives of others, fostering a supportive and inclusive environment. My empathetic approach enhances collaboration and builds trust among team members and stakeholders, ensuring that everyone feels valued and heard, which drives effective teamwork.

Clear & Concise Communication

Proficient in conveying complex technical information in a clear and concise manner, tailored to diverse audiences. Whether presenting to technical teams or non-technical stakeholders, I ensure that my communication bridges gaps in understanding, facilitating informed decision-making and promoting a shared vision.

Conflict Resolution & Negotiation

Strong conflict resolution skills, adept at managing disagreements and facilitating constructive discussions. I approach conflicts with a problem-solving mindset, promoting open dialogue to reach mutually beneficial solutions. My negotiation skills ensure that I can advocate for team interests while maintaining positive relationships with all parties involved.

● **MANAGEMENT AND LEADERSHIP SKILLS**

Project Coordination & Execution

Proven ability to manage multiple projects simultaneously, ensuring timely delivery and alignment with organizational goals. Skilled in utilizing project management tools and methodologies to streamline processes, allocate resources efficiently, and monitor progress. This expertise enhances team productivity and drives successful project outcomes.

Team Development & Mentorship

Committed to fostering a collaborative team environment by providing mentorship and support to team members. Experienced in identifying individual strengths and facilitating professional development opportunities, resulting in enhanced team morale and increased performance. My leadership style promotes empowerment, accountability, and continuous learning within the team.

Strategic Decision-Making

Strong analytical and critical thinking skills, enabling informed decision-making in high-pressure situations. Adept at assessing risks, evaluating options, and implementing effective strategies that align with organizational objectives. This capability ensures that projects remain on track and that resources are utilized optimally, driving long-term success.

● **ORGANISATIONAL SKILLS**

Time Management & Prioritization

Demonstrated ability to effectively manage multiple tasks and deadlines by prioritizing workloads based on project urgency and importance. Employing time management techniques, I ensure timely completion of assignments while maintaining high-quality standards, allowing for increased productivity and efficiency in fast-paced environments.

Strategic Planning & Execution

Skilled in developing strategic plans to meet both short-term and long-term goals. My approach includes analyzing current resources and capabilities, identifying areas for improvement, and implementing actionable steps to drive progress. This foresight enhances project outcomes and ensures alignment with organizational objectives.

Documentation & Record Keeping

Proficient in maintaining organized and accurate documentation for projects, including reports, schedules, and communication logs. This meticulous attention to detail ensures that all team members are informed and on the same page, facilitating seamless collaboration and enabling quick access to critical information when needed.

● **LANGUAGE SKILLS**

Mother tongue(s): **TELUGU**

● NETWORKS AND MEMBERSHIPS

New Bern, NC

The Graphene Council

The Graphene Council is the largest community in the world for graphene producers, developers, investors, researchers, academics, nanotechnologists, regulatory agencies, research institutes, material science specialists and even the general public. We reach more than 35,000 people with an interest in this amazing material.

● RECOMMENDATIONS

Avutala Supriya Head of the Section

Mrs. A.Supriya Reddy , an Head of the Section (Diploma in Mechanical Engineering) at TKR College of Engineering & Technology, He played a pivotal role in my academic journey over the course of three years. I have been acquainted with him for the past three years and have taught him subjects like DESIGN OF MACHINE ELEMENTS, MACHINE DRAWING and CAD/CAM. I have noted that he is a very hardworking and team leading student with his independent thinking prowess and expressiveness. His proficiency and command over the English language is also a great asset.

Email avutalasupriya397@gmail.com

Y Govardan Reddy Assistant Professor

Mr. Y Govardam Reddy, an Assistant Professor at TKR College of Engineering & Technology, played a pivotal role in my academic journey over the course of three years. During this time, he imparted his expertise in Basic Workshop Technology, Advanced Workshop Technology, and Manufacturing Technology. During the course of my association with the students, I could observe that he has an excellent aptitude for problem solving because of inherent qualities of good imagination, analytical ability to organize facts. He is a student with high zeal and has capacity to lead motivated a team successfully.

Email ygovardanreddy@tkrcet.com

● HOBBIES AND INTERESTS

Technology Exploration

Passionate about staying abreast of the latest advancements in AI and machine learning, actively participating in online courses and workshops to enhance technical skills and knowledge. This curiosity fuels my desire to integrate innovative solutions into engineering practices.

DIY Projects & Prototyping

Enjoy hands-on experimentation with various engineering projects, from creating functional prototypes to exploring new manufacturing techniques. This hobby enhances my problem-solving skills and encourages creativity in design and engineering.

Writing & Content Creation

Engaged in writing blogs and articles on technology, engineering, and science topics, fostering a deeper understanding of complex concepts while honing communication skills. This interest also allows me to share knowledge and insights with a broader audience.

Outdoor Activities & Team Sports

Enthusiastic about participating in team sports and outdoor activities, which develop my teamwork and leadership abilities. These experiences teach valuable lessons in collaboration, resilience, and strategic thinking.

Volunteering & Community Engagement

Actively involved in local community initiatives and volunteering projects, reinforcing my commitment to social responsibility and teamwork. This interest reflects my desire to make a positive impact and connect with diverse groups.

