

Suren Elango

Chennai, Tamil Nadu, India

suren.elango2930@gmail.com | +91-9940024705 | LinkedIn: suren-elango-24880428a | GitHub: surenelango03

EDUCATION

Vellore Institute of Technology <i>B.Tech in Computer Science</i>	Aug 2023 – Aug 2027 Vellore, India CGPA: 9.47
Bala Vidya Mandir <i>High School</i>	Apr 2009 – Apr 2023 Chennai, India Percentage: 92%

EXPERIENCE

Research Intern – Deep Learning <i>IIT Delhi</i> <ul style="list-style-type: none">Designed deep learning models using CNNs and RNNs to enhance video clarity in rainy conditions.Benchmarked OCR accuracy after deraining using Qwen2.5, Tesseract, and EasyOCR.Trained and optimized 20+ neural network variants on HPC clusters with multi-GPU NVIDIA DGX-1 systems.Optimized data pipelines and debugged model convergence and runtime stability issues.	May 2025 – Present Delhi, India
Autonomous Systems Officer <i>Team Ojas Racing, VIT University</i> <ul style="list-style-type: none">Implemented ROS2 autonomous driving pipeline with stereo vision and cone detection.Integrated perception and navigation; simulated in Gazebo and tested on NVIDIA Jetson hardware.Collaborated with interdisciplinary teams for real-world deployments and demos.	Apr 2024 – Present Vellore, India

PROJECTS

Video Deraining using Deep Neural Networks — PyTorch, CNNs, Temporal Models <ul style="list-style-type: none">Developed deep learning models removing rain from videos leveraging temporal correlations.Trained on synthetic and real datasets; used CNN-RNN hybrid architectures.Tech: Python, PyTorch, TensorFlow, Docker, OpenCV, Jupyter	May 2025 – Present
ROS2 TurtleBot3 Patrol with Nav2 and SLAM — ROS2, Python, Gazebo <ul style="list-style-type: none">Simulated TurtleBot3 patrol using ROS2 Navigation Stack and SLAM with waypoint navigation.Created custom house map and URDF robot; enabled patrol via dynamic goal publishing.Final project for Edouard Renard's ROS2 Navigation 2 Stack certification.	Jun 2025 – Jul 2025
Gesture-Controlled Smart Home — Python, OpenCV, MediaPipe <ul style="list-style-type: none">Created non-contact smart appliance control system with real-time pose tracking.Implemented multiple gesture classes to toggle lights and lock doors, improving accessibility.	Jan 2025 – Apr 2025

SKILLS & TECH STACK

Languages: Python, Java, C, JavaScript, HTML5, CSS3

Frameworks/Libraries: ROS2, PyTorch, TensorFlow, OpenCV, Pandas, NumPy, MediaPipe

Tools: Docker, Git, Jupyter, Roboflow, HPC, Gazebo, VSCode

Technologies: NVIDIA Jetson, Linux, SLAM, Real-time Systems, Computer Vision, Deep Learning, Gen-AI, LLM

CERTIFICATIONS & HONORS

Oracle Cloud Infrastructure 2025 Generative AI Professional, OCI 2025 AI Foundations Associate, ROS 2 Nav2 with SLAM (Edouard Renard), HackerRank Python/Java (Basic), MATLAB Onramp, Winner – Hack the Hackathon (IEEE CS)

LEADERSHIP AND RESPONSIBILITIES

School Pupil Leader <i>Bala Vidya Mandir Senior Secondary School</i> <ul style="list-style-type: none">Head Boy and Student Council Member; organized events and promoted engagement.Enhanced leadership and public speaking via collaboration with staff and peers.	Jul 2022 – Mar 2023 Chennai, India
Management Team Member <i>Team Ojas Racing, VIT University</i> <ul style="list-style-type: none">Created business plan presentations for Formula Student Germany 2024 and Formula Bharat 2026.Led branding, content strategy, jersey design, and managed social media presence.Delivered persuasive presentations balancing technical and public-facing tasks.	Apr 2024 – Present Vellore, India
Marketing, Outreach, Sponsorship <i>CSED + IEEE SSIT, VIT University</i> <ul style="list-style-type: none">Promoted "Code 4 Change" hackathon generating 1000+ registrations.Managed outreach and sponsorships to improve industry engagement.	Apr 2024 – Dec 2024 Vellore, India