

DIPAK SAIRAMESH

San Francisco, CA • [E-mail](#) • (857) 308-8338 • [LinkedIn](#) • [Website](#)

EDUCATION

NORTHEASTERN UNIVERSITY

Boston, USA

Master of Science, Robotics (Artificial Intelligence and Computer Vision)

Dec 2023

- **Leadership Development:** LEAD360, Graduate Leadership Institute (Level 2 Badge)
- **Teaching Assistant:** Khoury College of Computer Sciences, CS5340 Computer/Human Interaction
- **Relevant Coursework:** Reinforcement Learning, Computer Vision, Fundamentals of A.I., Mobile Robotics

PES UNIVERSITY

Bangalore, India

Bachelor of Technology, Mechanical Engineering with specialization in Automotive Engineering

May 2018

- **Honors:** First Class with Distinction Recipient

SKILLS

- **Languages:** Python, JavaScript, C, C++, HTML5, CSS3, SQL, MATLAB, Arduino
- **Libraries:** numpy, matplotlib, pandas, sk-learn, sk-image, OpenCV, Pillow, YOLO
- **Technologies:** NLP, LLMs, Gen AI, GPT, Bard, Claude, Copilot, Postman, GitHub
- **Frameworks:** PyTorch, TensorFlow, Keras, Hugging Face, Jupyter, CUDA, ROS
- **DevOps/Cloud:** Jenkins, AWS, Docker, Azure, VMWare, Hyper-V, Google Colab
- **Data Visualization:** Tableau, PowerBI, Excel, Visio, Grafana, Kibana, QuickSight

PROFESSIONAL EXPERIENCE

NORTHEASTERN UNIVERSITY

Boston, USA

Makerspace Specialist, College of Arts, Media, and Design

Jan 2023 – Jun 2023

- Delivered technical training to 200+ students/faculty, elevating advanced machinery and **CAD/CAM** aptitude
- Enhanced prototyping efficiency by 25% via optimizing **laser** cutting, **3D** printing, and **CNC** routing methods
- Directed the incubation of a new **Creative Technology Lab** for interdisciplinary collaboration and innovation

ARUBA NETWORKS – HEWLETT PACKARD ENTERPRISE

Bangalore, India

Customer Advocacy Engineer, High-Touch Services

Feb 2019 – Jul 2021

- Achieved 25% faster migration of devices with zero downtime through **REST API** driven validation scripts
- Configured and deployed a 7-node **Aruba Central on Premises** solution on HP DL360 Gen 10 server, simulating 25,000 devices and enabling seamless network upgrades
- Collaborated with **cross-functional** teams to deliver customer-centric solutions, boosting issue resolution efficiency by 33% while utilizing **CI/CD** practices
- Created interactive dashboards using **Tableau Server** for **real-time data acquisition** from multiple data sources and **time-series analysis**, improving network insights and security
- Streamlined **KPI** monitoring and standardization with **Grafana**, **Kibana**, and **AWS Elasticsearch** for **data modeling** and **statistical visualization**
- Implemented root cause analytics of **UXI** sensors and proactive reporting with **SNOW/Webhooks** integrations
- Managed a team of 10 across 3 locations (India, USA, Australia) in global **spectrum analysis**, automating workflows that saved 20+ hours weekly and improving resource utilization by 50%

PROJECTS

Crater Observing Bio-Inspired Rolling Articulator (COBRA) | CNN, Label Studio, OpenVino, TensorRT

- Introduced **vision** and **path planning** through RealSense, Jetson Orin, and Raspberry Pi with a head redesign

Autonomous Mobile Robot, (TurtleBot3) | ROS, Gmapping, Cartographer, Gazebo, Rviz

- Accomplished a 95% detection rate of '36h11' AprilTags in simulated disaster environments using **SLAM**

Reinforcement Learning for Sudoku | Monte Carlo Tree Search, Deep Q-Networks

- Improved agent efficiency by 15% through reinforcement learning and sequential decision-making **algorithms**

Creative A.I. | VAEs, GANs, Stable Diffusion, Midjourney, Adobe Firefly, DALL-E, Gradio

- Leveraged LLMs and NLP for **prompt engineering** specific to diffusion processes employing **generative AI** for content creation and personalization, optimizing pre-trained models