HARSHAVARDHAN KUTHADI

https://www.linkedin.com/in/hkuthadi | harshavardhankuthadi2@gmail.com | (602) 741-4354

EDUCATION

Master's in Software Engineering **Expected May 2026**
Arizona State University **AZ, USA**

Bachelor's in Electronics and communication engineering **May 2022**
National institute of technology Karnataka, Surathkal **India**

SKILLS

- Tech Stacks: Kendo UI, Figma, MATLAB, SQL, MongoDB**,** React.js, REST APIs
- Programming Languages: JavaScript, C#, C++, HTML, CSS, Python, Solidity
- Technical Skills: Data structures and algorithms, Object-Oriented Programming, Debugging
- Tools: Git, Jenkins, Azure DevOps
- OS: Linux

EXPERIENCE

Software Development Engineer | o9 solutions,Inc.| Bengaluru, India **July 2022 - July 2024**

- Technologies Used: **Javascript, jquery, kendo UI, .NET Core, C#, MSSQL, Azure DevOps.**
- Optimized program performance by refactoring 10% of codebase, improving efficiency.
- Developed UIs for supply chain tools, integrating GIT and visualizing complex data.
- Built a responsive grid using **KendoUI** & **JavaScript** for merging and resolving Git conflicts.
- Coded keyboard shortcuts and improved screen reader compatibility, boosting accessibility by 60% (WCAG AA).
- Created and managed various end-to-end full stack modules for the platform, boosting Git repository and branch accessibility with user-specific edit permissions.
- Drafted release notes, bug reports and ConOps to capture operational requirements and track updates.
- Led development lifecycle phases, ensuring 30% test coverage and reducing bug reports.
- Refactored unit tests, reducing codebase by 10,000 lines and improving system robustness.

Software Development Intern | opennets | Bengaluru, India **May 2021 - July 2021**

- Developed a versatile network simulator tool to enhance network design and testing.
- Simulated network topologies using Mininet for comprehensive traffic testing.
- Implemented backend of simulator using **Node.js**, ensuring robust and efficient functionality.
- Designed a web-based UI with **Angular** and **MongoDB** for topology management.
- Collaborated on product development with engineers.

ACADEMIC PROJECTS

- Performance enhancement of underwater communication with ML:
  Constructed a machine learning model in **MATLAB** for light propagation in ocean waters, aiming to validate improved data rates and wireless capabilities for underwater free space optical links, addressing bandwidth limitations of acoustic communication. Used **NumPy, Simulink** libraries.
- Image Clustering of handwritten texts:
  Developed an image clustering project to group handwritten letters and numbers using an autoencoder for feature learning, followed by **K-means** clustering.
- Image Restoration of Natural Images:
  Developed an image restoration project focused on de-raining natural images using a **CNN**-based **encoder-decoder** network, with **ORSNet** applied in the final stage.