Madhav Kode Software Engineer

madhavkode5@gmail.com | +1 813 357 4901 | linkedin.com/in/madhavkode | Tampa FL (Relocatable in USA)

Education

Master of Science in Computer Science, University of South Florida, Tampa	*Aug 2023 – May 2025*
Bachelor of Technology in Computer Science, JNT University, Hyderabad	*Aug 2016 – May 2020*

Professional Experience

Graduate Research Assistant, University of South Florida — *Apr 2024 – Aug 2024*

- Managed team-based software projects from initial requirements gathering through successful deployment.
- Developed secure, full-stack web applications using enterprise-level best practices.
- Utilized object-oriented programming (OOP) concepts in Java and JavaScript for application development.
- Implemented and optimized relational database schemas, writing complex SQL queries and ensuring data integrity.

Software Engineer, Deloitte USI — *Aug 2020 – Aug 2023*

- Developed and maintained RESTful APIs using ASP.NET Core, enabling seamless communication between front-end applications and databases.
- Wrote efficient SQL queries and stored procedures to interact with relational databases, primarily SQL Server.
- Collaborated with front-end teams using React.js to build and integrate user-facing features.
- Integrated automated testing into CI/CD workflows using Azure DevOps and Git, ensuring code quality and deployment consistency.
- Assisted in debugging, optimizing performance bottlenecks in .NET apps, improving response times & reliability.

Projects

Published research: Glaucoma Detection Using Deep Neural Networks

- Developed a deep learning model utilizing transfer learning with the VGG-19 architecture, achieving a 93.41% accuracy in classifying glaucoma from a dataset of over 5,500 fundus images.
- Enhanced the model's performance through advanced preprocessing techniques and hyperparameter tuning, contributing to early and accurate detection of glaucoma.
- Published paper with Springer in *Algorithms for Intelligent Systems* series — DOI: 10.1007/978-981-33-4046-6_21.

CampConnect: Full-stack web app

- Developed a full-stack MERN application for users to create, review, and manage campsite listings with geolocation, image uploads, and real-time updates.
- Implemented user authentication, authorization, and RESTful APIs using Express.js and MongoDB; deployed on Heroku with Cloudinary for image storage and Mapbox for interactive maps.

Skills

Programming:	C#, Python, Java, OOP Principles, Data Structures & Algorithms
Web technologies:	HTML5, CSS3, JavaScript, Bootstrap, jQuery, Node.js
Frameworks:	.NET, .NET Core, ASP.NET MVC, RESTful APIs
Databases:	SQL Server
Tools:	Git, Github, Visual Studio, Postman
Methodologies:	Agile/Scrum, SDLC

Certifications

- Microsoft Certified: Azure Fundamentals AZ-900.
- Training and certifying for the ISC2 Certified in Cybersecurity (CC) to strengthen core competencies in security principles, risk management, and network defense.