# Jai Kumar Dewani

## **EXPERIENCE**

## Carl Zeiss - Vision Care R&D and Technologies

July 2022 - Present

Design Engineer

Bengaluru, Karnataka, India

- Owned the product and lead the development of the Visual Acuity testing module, driving successful market release
- Assumed a leadership role within the team, working alongside them to successfully deliver VISUCORE Release 1.1
- Collaborated with hiring managers to successfully recruit top-tier entry-level and experienced developers, enhancing the talent pool for our team and VTS division
- Enforced atomic operations to streamline development and reduce cognitive load
- Designed a queuing mechanism in the response handler, **reducing click-to-response time by 40**% during high-frequency interactions
- Migrated product from .NET Framework 4.8 to .NET 8, enhancing performance, future-proofing development, and eliminating security vulnerabilities
- Engineered an interop wrapper around C++ driver DLLs to bridge hardware-level integrations ensured reliable cross-language communication and reduced dev effort by 30%.

## Carl Zeiss - Vision Care R&D and Technologies

June 2021 - June 2022

Software Engineer

Bengaluru, Karnataka, India

- Enhanced team agility by refining hardware mocking to minimize dependence on physical devices.
- Improved code quality and security through PR checks, static analyzers, and adherence to Roslyn's best practices.
- Aligned cross-functional teams to define and seamlessly integrate API requirements, ensuring clean and extensible code
- Integrate gRPC to facilitate IPC mitigating coupling and optimize parallel development across services

#### **EDUCATION**

# International Institute of Information Technology, Naya Raipur

August '17 – June '21

Bachelor of Technology in Computer Science

Naya Raipur, Chhattisgarh India

#### **PROJECTS**

# VISUCORE 500 | C#, Angular | Zeiss VISUCORE 500

Jan 2021 - Current

- Owned the development of visual acuity testing module for market releases R1 and R1.1
- Collaborated with Product team to transfer Refraction module and reduce turn around time by enhancing **performance of workflow by 28**% through restructuring the application response keeping asynchronous design principles at the center

## VISUSCREEN 100/500 | C#, HTML, CSS, JS | Zeiss VISUSCREEN 100/500

June 2023 - August 2023

- Designed and implemented a lock-and-release mechanism to enforce mutual exclusion protocol to critical communication channels, enhancing system stability
- Authored comprehensive system integration documentation to enable seamless software releases

#### FunMark | Python | GitHub

May 2020

- Developed a minimal-overhead wrapper to benchmark and visually function performance
- Released on PyPi package manager to be easily accessible with pip with currently over 7K downloads

## **TECHNICAL SKILLS**

Languages & Frameworks: C#, .NET, Angular, JavaScript, Python

Developer Tools: Azure, MSBuild, MySQL, SonarQube, Blackduck, IRIUS Risk Docker, CI/CD, Git

Technologies: .NET, ASP.NET WPF, gRPC, Node.js, Angular, React

## ACADEMIC ACHIEVEMENTS & EXTRA-CURRICULAR

- Contributed to open-source tools like Excalidraw, PowerToys
- · Organized Coding Dojos between Indian and German colleges to foster collaborative hacking culture
- Mentored and Judged over 100+ teams across nationwide hackathons like HackCBS 4.0, HacckOn 2.0 and DotSlash 4.0
- **Co-founded** the first technical club at IIIT-NR, organized various events, talks and hackathons to promote competitive programming and development while improve the coding environment of the Institute.
- Qualified ACM-ICPC 2019 & 2020 in Kanpur(rank 63), Kharagpur(rank 81), Amritapuri(rank 37) and Gwalior regions