# Jai Kumar Dewani

## **EXPERIENCE**

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

July 22 - Present

Design Engineer

Bengaluru, Karnataka, India

- Executed migration of product from .NET Framework to .NET Core, eliminating dependency on obsolete libraries
- Streamlined request handling efficiency through the design of a queuing mechanism in the response handler, achieving a **40% reduction in click-to-response time** over multiple clicks
- Owned the product and spearheaded the development of the Chart Viewer, overseeing its market release
- Revamped Chart Viewer to enforce atomic operations, streamlining complexity and minimizing potential chances of bugs
- Enhanced **efficiency of workflow features 23%** via restructuring application response keeping asynchronous software architecture at the center

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

June 21 - June 22

Software Engineer

Bengaluru, Karnataka, India

- Empowered team agility with advanced development strategies, refined hardware mocking to reduce device reliance
- Boosted testing and code quality through PR checks using static analyzers and rigorous code reviews
- Aligned cross-functional teams to define and seamlessly integrate API requirements, ensuring clean and extensible code
- Created IPC channel protocols and integrated gRPC to mitigate coupling and optimize communication across services
- Utilized NUnit and Fluent Assertions to develop new unit tests, helping improve the overall development cycle

#### **EDUCATION**

## International Institute of Information Technology, Naya Raipur

August '17 – June '21

Bachelor of Technology in Computer Science

Naya Raipur, Chhattisghar India

#### **PROJECTS**

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

Jan 2021 - Current

- Enhanced ChartViewer, a visual acuity testing desktop app
- Collaborated with German team to enhance and transfer Refraction module
- Decomposed monolithic project into 3 gRPC-based services to minimize coupling

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

June 2023 - August 2023

- Implemented a lock and release mechanism to ensure a maximum of one connection to critical communication channels, ensuring system stability
- Produced comprehensive system software integration documentation to facilitate the seamless release of software changes into the market
- Mastered end-to-end product life cycle and Agile methodologies

## FunMark | Python | GitHub

May 2020

- Developed a zero-overhead wrapper to benchmark and visually depict function performance.
- Released on PyPi package manager to be easily accessible with pip with currently over 6K downloads
- Documented the process on how to utilize the library efficiently on jai-dewani.github.io/blogs/fun-mark/

#### TECHNICAL SKILLS

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

Developer Tools: Azure, Git, GitHub, CI/CD

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

#### ACADEMIC ACHIEVEMENTS & EXTRA-CURRICULAR

- Mentored and Judged over 50+ teams in various 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.
- Ranked 1127<sup>th</sup> globally and 115<sup>th</sup> in India in Google HashCode, out of 10724 teams
- Qualified ACM-ICPC 2020 in Kanpur(rank 63) and Gwalior regions
- Qualified ACM-ICPC 2019 in Kharagpur(rank 81) and Amritapuri(rank 37) regions.