



# Yuvraj Singh



📍 Bhubaneswar, Odisha — 📞 8810873483 — ✉️ zyvuraj53@gmail.com — 🔗 linkedin.com — 🌐 github.com/zyvuraj53 — 🌐 Portfolio

**Summary** — Computer Science and Engineering student with expertise in **AI/ML, Full-Stack Development, Cloud Computing, Secure Development**. Passionate about **data-driven applications, predictive modeling, secure architectures, and scalable automation**. Proven ability to **optimize AI pipelines, and build high-performance applications**.

## Skills

<b>Web Dev</b>	React.JS, Next.JS, Redux, Express.JS, MongoDB, PostgreSQL, Redis, FireBase, SupaBase, Docker, JIRA	<b>OS and Tech</b>	Debian, BSD, Arch, Git, GitLab, GitHub
<b>Languages</b>	C, C++, Java, JavaScript, TypeScript, Python, Rust, Go, SQL, Bash, Haskell, Lua	<b>Machine Learning</b>	TensorFlow, PyTorch, Numpy, Pandas, Time-Series Modelling, Data Mining
		<b>Soft Skills</b>	Leadership, Analytical Thinking, Team Collaboration, Communication

## Experience

### Odisha Potli (odishapotli.com)

Feb 2025 - March 2025

*Full-Stack Developer (Freelance)*

#### Client-Side Development

- **Page Load Time Reduced by 50%:** Optimized assets, lazy-loaded images, and minified CSS/JS reduced the initial page load from 4s to 2s.
- **Decreased Bounce Rate:** Improved page responsiveness and mobile-first design led to better retention, decreasing bounce rating by 45%.
- **SEO Score Improved:** Structured HTML, optimized metadata, and better Core Web Vitals pushed rankings higher improving SEO score by 45%.

#### Server-Side Development

- **API Response Time Reduced by 60%:** Optimized database queries, and reduced payload size, bringing response times from 500ms to 200ms.
- Optimized database performance through indexing and query tuning techniques
- **Query Execution Time Improved by 50%:** Indexed frequently queried fields and optimized MongoDB/Mongoose queries.

### Konnexions IT Society

Feb 2023 – Apr 2024

*FrontEnd Developer*

- As a **web developer** at **Konnexions**, I played a key role in designing, developing, and optimizing our society's website—turning it into a fast, scalable, and user-friendly platform!
- **Enhanced UI/UX by 35%:** Designed a clean, modern, and interactive interface for a seamless user experience.
- **Screened Assessed Candidates:** Evaluated technical skills, problem-solving abilities, and UI/UX expertise.

## Projects

### Inventory Management System (FullStack App)

- **100% Type-Safe Codebase:** Used TypeScript to eliminate runtime errors and enhance maintainability.
- **Optimized for Mobile Desktop:** Achieved 100% responsive design with Tailwind CSS and server-side rendering (SSR).
- **Real-Time Inventory Updates:** Integrated WebSockets for instant stock updates across multiple users.

### Burst Time Optimization using RNNs (Published Research)

- **Created an AI-based CPU scheduling optimizer**, reducing process latency by 35%.
- **Published research in peer-reviewed AI journals**, contributing to advancements in CPU scheduling optimization.

### Student Dropout Prediction (Published Research)

- **Designed a student retention prediction model** using XGBoost, MLP, and Decision Trees, achieving **96% accuracy**.
- **Published research in an Springer conference**, advancing AI in education technology.

## Education

### KIIT University

9.3 CGPA

*Bachelor of Science in Computer Science Engineering*

*Minors: AI/ML Specialization*

### Higher Secondary - Sunbeam Academy, Samnaghat

89.4%

### High School - St. John's School, B.L.W.

92.4%