Sunit Kumar Singha

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Education

B.Tech. in Electrical Engineering   **CGPA: 9.13/10.0**
Indian Institute of Technology (IIT), Kharagpur   *2018-2022*
Micro-Specialization in Artificial Intelligence and Applications   CGPA: 9.81/10.0

Work Experience

SuperAGI   **Remote, Global**
Software Engineer   *March 2025 - Present*
- Developed and integrated **LLM-powered chatbots** using **Golang** and **Ruby on Rails**, enhancing conversational AI capabilities for enterprise applications.
- Collaborated with cross-functional teams to deploy LLM-driven solutions, ensuring compliance with security and data privacy standards.

Honeywell International Inc.   **Bangalore, India**
Software Development Engineer 2   *July 2022 - Nov 2024*
- Designed and implemented highly scalable RESTful microservices for **Forge Identity and Access management** using NodeJS ensuring robust authentication and authorization workflows while achieving 95%+ unit test coverage for reliability and maintainability.
- Collaborated on the **Login Deployment pipeline**, integrating **Prometheus pods** for comprehensive monitoring and metric collection.
- Configured key performance metrics, including **login response time**, **policy agent access time**, and **database fetching time**, achieving a 40% improvement in database query performance to enable proactive issue detection and optimize system performance.
- Rectified over **50 issues** within **BlackduckHub** and **Coverity** while addressing security concerns, alongside enhancing unit testing coverage for the **SonarQube** Report to achieve above **95% coverage**.
- Engineered a role-based user management system with **.NET and Entity Framework**, designing a scalable database,implementing RESTful APIs for user provisioning and role management, and supporting 1,000+ concurrent users delivering solutions characterized by efficiency and scalability.
- Achieved a **35% reduction in query execution times**, significantly enhancing data flow and improving the overall user experience.
- Actively participated in **Agile software development practices**, including daily stand-ups, sprint planning sessions, and team retrospectives, leading to the delivery of **96% of sprint goals** on time.
- Built a **serverless, event-driven email notification system** using **Azure Functions**, **PostgreSQL triggers**, processing over **10,000+ notifications daily**. Improved throughput and reduced latency by **25%** through batch processing.

Honeywell International Inc.   **Bangalore, India**
Machine Learning Internship   *May 2021 - July 2021*
- Executed detailed evaluations of real customer data from **AHUs**, leading to the creation of an energy optimization report; findings were integrated into operational protocols, influencing energy management strategies for **10+ clients**.
- Applied **multivariate time series analysis** and developed a **Vector Auto-Regressive (VAR) algorithm** to predict demand responses to setpoint changes with **90%+ accuracy**, identifying **15+ zonal plants** for optimization, leading to improved energy efficiency.

Projects

- **AI-driven Code Generator with Live UI Preview** (Sept 2024 - Jan 2025)
  - Developed a **Golang powered backend** and a React-based frontend, integrating **OpenAI's GPT-3** for AI-driven code generation, enhanced with **RAG**, improving response accuracy by **30%**. Enhanced performance by using **goroutines, connection pooling, rate limiting**, and caching strategies.
  - Increased application speed by **5%** using **Next.js (SSR & SSG)**, implementing **lazy loading, code splitting**, and BaseWeb UI components to ensure a responsive and high-performance user experience.
- **Blue Yonder's Next-Gen Optimized Delivery Ecosystem Event**
  Inter IIT Tech Meet 10.0 Low Prep Event
  - Designed a 3D drone deployment solution leveraging **NSGA-II** for **adaptive** re-planning around no-fly zones and multiple warehouses.
  - Streamlined demand fulfillment, reducing total costs (energy and maintenance) by **25% while minimizing drone usage by 20%**.

Technical Skills

- **Programming Languages:** Node.js, Python, C (.NET), PostgreSQL, C/C++, Java, Golang
- **Libraries and Frameworks:** TypeScript, Next.js, React,Express.js, TensorFlow, Keras, Generative AI
- **Cloud Platforms and Tools:** Microsoft Azure, Docker, Kubernetes, Git, Bitbucket, Bamboo, Kibana, Grafana, PostgreSQL

Awards and Achievements

- 2022: Secured **Global Rank 36** in **Credit Suisse Global Coding Challenge**.
- 2021: Achieved **Global Rank 445** in **Google Kickstart** Round F and **Rank 1497 (top 4%)** in **Facebook Hackercup** Round 2.
- 2021: Secured **45th Rank** in **Ode 2 Code** by Xiaomi India and advanced to the finals of **JUMPSTART** by Publicis Sapient.
- 2019: Ranked under **top 7%** in IIT Kharagpur and successfully transferred to the Electrical Engineering department.
- 2018: Secured **All India Rank 2664** in **JEE Advanced** among 1.3 million candidates.