Rohan Waghmare

✉ rwaghmare@binghamton.edu | 📱 (607) 245 6001 | ⌂ /ron103 | in/rohanwaghmare | 🌐 rohanwaghmare.com

EDUCATION

Binghamton University, State University of New York	Binghamton, U.S.A.
Master of Science, Computer Science	*Aug 2023 - May 2025*
School of Engineering, MIT ADT University	Pune, India
Bachelor of Technology, Computer Science	*Aug 2019 - May 2023*

TECHNICAL SKILLS

Languages:	Python, C, C++, Javascript, HTML, CSS
Frameworks:	Django, Tensorflow, React.js, Pandas, OpenCV, Node.js, Express.js, Streamlit, Next.js, MUI
Databases:	PostgreSQL, MongoDB, MySQL
Cloud & DevOps:	AWS (EC2, S3, lambda, API Gateway, SQS, DynamoDB), Docker, Kubernetes, Jenkins, CI/CD
Tools & Skills:	Git/GitHub, Linux/Unix, Kafka, RabbitMQ, Redis, REST APIs, pytest, unittest, Selenium, Postman

WORK EXPERIENCE

Software Engineer — Aug 2024 – Present
Binghamton Tech Collective — *Binghamton, NY*

- **Web Development:** Spearheaded a team of 6 engineers to design and develop the official club website using **React.js and Firebase,** increasing user engagement by **35%** through **UI/UX** enhancements and real-time features.
- **Backend Management:** Optimized backend services for an e-commerce application redesigned with **Node.js & Express.js**, improving load times by **30%** via asynchronous programming and caching strategies.
- **Mobile Application Development:** Engineered a cross-platform mobile application interface using **Flutter**, resulting in a **25%** increase in user acquisition by expanding platform accessibility.
- **Collaboration:** Integrated **Agile** methodologies, leading daily stand-ups and sprint planning.

Backend Engineer Intern — Jun 2024 – Aug 2024
Flow — *Wilmington, DE*

- **Django Development:** Developed and maintained scalable backend applications using **Django**, enhancing system performance and responsiveness across critical services.
- **Data Integration:** Constructed efficient **data pipelines** for Crunchbase, PitchBook, & LinkedIn web scrapers, managed complex **PostgreSQL** databases, & reduced data inconsistencies by **43%** by schema validation & **ER diagramming.**
- **AI Integration:** Aggregated and preprocessed large data collected from web scrapers for training a predictive AI model.
- **Systems & Cloud Architecture:** Played a key role in designing scalable system architectures, implemented **Kafka** for real-time data streaming, and configured cloud services on **AWS** reducing cloud expenses by **22%.**
- **API Development:** Architected secure **RESTful APIs** with token-based authentication and **OAuth2.0**
- **Linux & Automation:** Employed **Linux** environments for server management and automated tasks using **Bash** and **SSH** increasing deployment efficiency by **18%** and reducing production downtime.

PROJECTS

Wallet-io | *MongoDB, Express.js, React.js, Node.js, Typescript* *(Link)*
- Designed a **TypeScript/React** financial dashboard featuring **9+ Recharts/Material UI charts** for monthly Profit, Revenue, and Loss, indicating **4%** growth and coded backend with **Node.js, Express.js,** and **MongoDB,** using **machine learning** to predict **12%** annual growth.

Population Density | *React.js, OpenStreetMap, Material UI, Leaflet.js* *(Link)*
- Engineered a geospatial app with **React.js, Leaflet.js,** and **Node.js/Express.js,** visualizing population, live country coloring, and travel coverage, achieving **92.5%** accuracy using **OpenStreetMap** and census data.

Detection of Tuberculosis using Transfer Learning | *Tensorflow, Transfer Learning Models, Python* *(Link)*
- Led a team to evaluate **InceptionV3, EfficientNetB3, DenseNet201, and ResNet50** for TB detection via chest X-rays, achieving **99.95%** accuracy on the **TBX11K** dataset, aiding **2.4M+** diagnoses nationwide, and published IEEE paper titled *A Comparative Study of Detection of Tuberculosis using Machine Learning and Deep Learning*

Sign Language to Text using LSTM | *Tensorflow, LSTM, OpenCV, Python* *(Link)*
- Developed a real-time sign language to text translator using **Deep Learning, OpenCV,** and **LSTM** networks, achieving **96.43%** accuracy and aiding **6.3%** of the affected population.

CERTIFICATIONS

- **AWS** Certified Cloud Practitioner
- **Nvidia** Fundamentals of Accelerated Computing with CUDA C/C++