Rohan **Waghmare**

SOFTWARE DEVELOPER · BACKEND ENGINEER

☎ (+607) 245-6001 | ✉ rwaghmare@binghamton.edu | 🏠 www.rohanwaghmare.com | ⬡ github.com/ron103 | 🔗 linkedin.com/in/rohanwaghmare

Education

Binghamton University, State University of New York   *Binghamton, NY*
M.S. IN COMPUTER SCIENCE   *Aug. 2023 - May. 2025*

School of Engineering, MIT ADT University   *Pune, India*
B.TECH. IN COMPUTER SCIENCE AND ENGINEERING   *Aug. 2019 - May. 2023*

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, SQL, NoSQL
Cloud & DevOps:	AWS (EC2, S3, lambda, API Gateway, SQS, DynamoDB), Docker, Kubernetes, CI/CD
Tools & Skills:	Git/GitHub, Linux/Unix, Kafka, RabbitMQ, Redis, REST APIs, pytest, unittest, Selenium, Postman

Work Experience

Binghamton Tech Collective   *Binghamton, NY*
SOFTWARE ENGINEER   *Aug. 2024 - Present*

- 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.
- 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.
- Engineered a cross-platform mobile application interface using **Flutter**, resulting in a **25%** increase in users by expanding platform accessibility.
- Integrated **Agile** methodologies, leading daily stand-ups and sprint planning.

Flow   *Wilmington, DE*
BACKEND ENGINEER   *Jun. 2023 - Aug. 2023*

- Developed and maintained scalable backend applications using **Django**, enhancing system performance and responsiveness.
- Constructed efficient **data pipelines** for Crunchbase, PitchBook, & LinkedIn web scrapers, managed complex **PostgreSQL** databases, & reduced data inconsistencies by **43%** by schema validation & **ER diagramming.**
- Aggregated and preprocessed large data collected from web scrapers for training a predictive AI model.
- 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%.**
- Architected secure **RESTful APIs** with token-based authentication and **OAuth2.0**

Projects

Wallet-io   *Link to Project*
MONGODB, EXPRESS.JS, REACT.JS, NODE.JS, TYPESCRIPT

- 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   *Link to Project*
REACT.JS, OPENSTREETMAP, MATERIAL UI, LEAFLET.JS

- 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   *Link to Project*
TENSORFLOW, TRANSFER LEARNING MODELS, PYTHON

- Designed a **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.

Certifications & Publication

AWS	Certified Cloud Practioner
Nvidia	Fundamentals of Accelerated Computing with CUDA C/C++
IEEE	A Comparative Study of Detection of Tuberculosis using Machine Learning and Deep Learning