# Kolitha Warnakulasooriya
## Software Engineer

Mobile, Alabama, United States | +1 251 373 5542
Mail: **kolitha.warnakulasooriya@outlook.com**
Portfolio: **kolithawarnakulasooriya.github.io**
LinkedIn: **linkedin.com/in/kolitha-warnakulasooriya**
Github: **github.com/kolithawarnakulasooriya**

## EDUCATION

**University of South Alabama | Mobile, Alabama**  Expected 05/2025
Doctor of Philosophy (Ph.D.), Computing, Computer Science (Defended) | GPA: 3.91

**University of Moratuwa | Colombo, SriLanka**  07/2018
Bachelor of Science (Hons), Information Technology | GPA: 3.55

## SKILLS

| | |
|---|---|
| **Languages:** | JavaScript, TypeScript, Java, Python, SQL, HTML, CSS |
| **Frameworks:** | React, React Native, Redux, Webpack, Node.js, Express Js, Pytorch, Springboot |
| **Databases:** | PostgreSQL, MySQL, MongoDB, DynamoDB |
| **Test, Cloud & DevOps:** | AWS, Docker, Jenkins, Git, GitHub Actions, Jest, Cypress, Junit, ZenML, MLflow |
| **Other**: | System design, Application development, Algorithm development, Problem-solving, Analytical, and Communication |

## PROJECTS

MineArc Service App | Freelanced Project (minearc.com/serviceapp)
- Developed an E2E hybrid application to maintain the service terms in React and React Native frameworks and enhanced cross-functional partnership via code reviews.

E2E Machine Learning Framework (github.com/kolithawarnakulasooriya/e2e-ml-flow)
- Ongoing self-project, developed in Python for a framework for end-to-end system development using MLFlow, with ZenMl pipeline, equipped with data ingestion and univariate, bivariate, and multivariate analysis strategies, achieved 95% code coverage through unit testing.

## PROFESSIONAL EXPERIENCE

**Research Assistant | University of South Alabama | Mobile, Alabama**  01/2022 – Present
- Engineered a dynamic leader election algorithm for multi-UAV systems, boosting operational **efficiency by 89.7%**.
- Supervised three pivotal UAV research projects, increasing **project completion rates by 25%**.
- Performed comprehensive literature reviews to substantiate research hypotheses, ensuring robust and credible methodologies for machine learning, neural networks, AI, and robotics.

**Lead Engineer (Associate) | SyscoLabs Technologies | Colombo, Sri Lanka**  08/2021 – 01/2022
- Promoted to assistant engineering manager for Sysco Shop CRM's core team, leading over 10 engineers to **double team performance**.
- Coordinated agile and scrum processes by planning sprints, conducting daily stand-ups, and managing retrospectives using JIRA software, **reducing team lead overhead by 50%**.
- Managed meeting documentation on Confluence, ensuring information clarity and accessibility for all team members and key stakeholders.

**Senior Software Engineer | SyscoLabs Technologies | Colombo, Sri Lanka**  12/2019 – 08/2021
- Oversaw, maintained, and managed large-scale applications, front-end components, back-end modules, microservices, and databases across production environments in **cloud services like AWS**.
- **Resolved three critical issues** and served as an on-call representative, achieving zero reported production incidents related to managed components.
- Conducted thorough code reviews, debugging, and troubleshooting to ensure best practices and standards in the codebase, product area, systems, and infrastructure.

**Software Engineer | SyscoLabs Technologies | Colombo, Sri Lanka**  07/2018 – 11/2019
- Developed responsive web and mobile interfaces using React, React Native, and ES6, implementing Redux state management utilizing object-oriented programming concepts.
- Designed and implemented **back-end services, RESTful, GraphQL, and Salesforce APIs within a microservice architecture, using Spring Boot and Node.js Express** for efficient data management.
- Reduced **bug occurrences by 90%** through comprehensive unit, component, integration, and end-to-end testing.