

# Thurunu Mihiranga

## Computer Science Undergraduate

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### Summary

As a Computer Science undergraduate, I'm passionate about software development and exploring emerging technologies. I have hands-on experience with AWS, Spring Boot, Docker, and Linux system administration. My academic work sharpened my skills in writing clean, efficient code and applying design patterns. I enjoy working in agile teams and contributing to real-world problem solving. Curious and driven, I'm always looking to grow as a developer. To me, development isn't just a skill — it's something I truly enjoy.

### Technologies

<b>Languages</b>	Java   Python   JavaScript   C   SQL
<b>Frameworks</b>	Spring Boot   Express.js   Flask   Bootstrap
<b>Databases</b>	MySQL   MSSQL Server   Firebase   MongoDB
<b>Markup &amp; Frontend</b>	React.js   HTML   CSS   XML   YAML
<b>DevOps Tools</b>	Docker   GitHub Actions   Terraform   Kubernetes   Prometheus   Git
<b>Cloud Platforms</b>	AWS   Google Cloud

### Education

#### Bachelor of Science Computer Science (Hons)

Jan 2022 - Dec 2025

General Sir John Kotelawala Defence University, Sri Lanka

### Certifications

• <b>Introduction to Linux (LFS101)</b>	Mar 2025
• <b>Introduction to Kubernetes (LFS158)</b>	Jun 2025
• <b>GitHub Actions - KodeKloud</b>	Feb 2025
• <b>Docker Foundations Professional Certificate</b>	Mar 2025
• <b>AWS Introduction to Cloud 101</b>	Mar 2025
• <b>CCNAv7: Introduction to Networks</b>	Jan 2023

### Publications

#### Advances in Multi-modal AI for Breast Cancer Diagnosis: A Comprehensive Review

Feb 2025

Thurunu Mihiranga, GAI Uwanthika

5th Student Symposium, Faculty of Computing 2025,

General Sir John Kotelawala Defence University, Sri Lanka

## Projects

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| <b>1. Evo Tux</b> , Smart Linux Kernel Parameter optimizer   | Final Year Project<br>Ongoing            |
| <ul style="list-style-type: none"><li>Developing an automated tool leveraging genetic algorithms to dynamically optimize critical Linux kernel parameters, to improve system performance.</li><li><b>Technologies:</b> Python (DEAP)   Linux (sysctl / sysfs)   sysbench</li></ul>   |  |
| <b>2. SpringBoot</b> , Authentication API  | Self-Study Project<br>Feb 2025           |
| <ul style="list-style-type: none"><li>Developed a secure authentication &amp; authorization API with Spring Security &amp; JWT, enhancing system security and user authentication.</li><li>Integrated AWS RDS and implemented role-based access control (RBAC), improving database efficiency and access management.</li><li><b>Technologies:</b> SpringBoot   AWS RDS   MySQL</li></ul> |  |
| <b>3. Beowulf Cluster for Parallel Computing</b> , Distributed Computing Setup   | Academic Project<br>Dec 2024             |
| <ul style="list-style-type: none"><li>Configured a distributed computing cluster using virtual machines, enhancing computational efficiency.</li><li>Automated network setup, SSH access, and MPI configuration for high-performance computing.</li><li><b>Technologies:</b> Linux   Bash   SSH   MPI</li></ul>  |  |
| <b>4. Loan Manager</b> , Desktop Application   | Freelance Project<br>Aug 2024 – Spt 2024 |
| <ul style="list-style-type: none"><li>Developed a Java-FX based financial management system for tracking loans and repayments, enhancing user experience.</li><li><b>Technologies:</b> Java   Java-FX   MySQL</li></ul>  |  |
| <b>5. Skin Oiliness Detection API</b> , Real-time Image Analysis   | Academic Project<br>Apr 2024             |
| <ul style="list-style-type: none"><li>Engineered a RESTful API for real-time image analysis using AI-based skin condition detection, deployed on AWS Lambda.</li><li>Utilized Flask and Docker to streamline development and deployment processes.</li><li><b>Technologies:</b> AWS Lambda   Flask   Docker</li></ul>  |  |


## Extracurricular

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- Travel Enthusiast** – enjoy hiking and exploring new places during leisure time
- Rugby player** – actively participated in school-level tournaments
- Volunteering** – contributed to university student chapters projects

## References

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- Dr. Kaneeka Vidanage**  
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