

Phanuphat Srisukhawasu

+65 8090 5619 | Singapore | phanuphat.srisukhawasu@gmail.com

github.com/oadultradeepfield | linkedin.com/in/phanuphats | phanuphats.com

PROFESSIONAL SUMMARY

Astronomy Olympiad medalist turned Computer Science major with strong analytical skills and keen attention to detail. Passionate about building interactive learning tools and applying technology to create positive impact in non-technical fields.

EDUCATION

Bachelor of Computing, Computer Science, National University of Singapore

Expected Graduation: May 2027

- GPA: 4.63/5.00 (First Class Honours)
- Relevant Coursework: Object-Oriented and Functional Programming (Java), Data Structures and Algorithms (Java)

WORK EXPERIENCE

Software Engineer Intern

May 2025 – Aug 2025

Computing for Voluntary Welfare Organisations (CVWO)

Singapore

- Migrated 10,000+ lines of legacy Ruby on Rails code to React and Go for account statement modules, improving maintainability and performance by 50% for web application serving 10+ elderly care centers.

AI Research Student (Mentored By Dr. Suttiwat Madlee)

May 2022 – Mar 2024

Department of Physics, Faculty of Science, Ramkhamhaeng University

Bangkok, Thailand

- Developed an automated cosmic ray detection system for small cloud chambers using YOLO models in PyTorch, reducing analysis time from hours to minutes while maintaining 80% accuracy.
- Engineered an X-class solar flare identification solution with custom convolutional autoencoders in PyTorch as an anomaly detector, improving accuracy by 30% and addressing class imbalance challenges.

PROJECTS

Micron AI Challenge (kaggle.com/code/psrisukhawasu/micron-ai-otter-notebook)

- Designed a PCA pipeline reducing 500+ time series features to 50 tabular features while preserving 90% variance.
- Trained tree-based models for lightweight prediction with competitive accuracy in virtual metrology for semiconductors.

Boonchubike (boonchubike.com)

- Rebuilt a Thai bicycle shop's e-commerce site with React, Go, and AWS (Lambda + API Gateway) to scale for higher traffic.
- Designed a built-in analytics dashboard with Google Analytics to track website visitors for 100+ customers nationwide.

Olympliance (olympliance.netlify.app | github.com/oadultradeepfield/olympliance-backend)

- Built a forum to facilitate Science Olympiad problem discussion with gamified elements to enhance user engagement.
- Technologies: React, TypeScript, Redux, Go, PostgreSQL, Docker, JWT Authentication, Google Cloud Platform.

PUBLICATIONS

- Srisukhawasu, P., Silapasart, A., Limjanon, T., Madlee, S., Samanrak, C., Somnam, T. **DeepHCC: Deep learning model for real-time count rate determination of particles in homemade cloud chamber.** Journal of Physics: Conference Series, vol. 2653, no. 1, 2023. doi.org/10.1088/1742-6596/2653/1/012007.
- Srisukhawasu, P., Somnam, T., Madlee, S. **Enhancing Strong Solar Flare Prediction Using Convolutional Autoencoders for Anomaly Detection on HMI Magnetograms.** ESS Open Archive, 2025. doi.org/10.22541/essoar.174431882.20472576/v1.

SKILLS

Programming Languages

Python, Java, Go, JavaScript, TypeScript, C++, C, SQL, R, HTML, CSS

Frameworks, Libraries, & Tools

React, Next.js, Tailwind CSS, Spring Boot, PyTorch, Docker, AWS, PostgreSQL, Git

AWARDS

- International Astronomy Olympiad (IAO) 2021 – Silver Medal (Top 8%)
- International Olympiad on Astronomy and Astrophysics (IOAA) 2022/23 – Bronze Medal