

Phanuphat Srisukhawasu

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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

- Currently working with a team of 11 to migrate the Home Personal Care module from Ruby on Rails to React and Go.

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 using customed 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) Jun 2025 – Present

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

Boonchubike (boonchubike.com) Jan 2025 – Present

- Rebuilt a Thai bicycle shop's e-commerce site using 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) Dec 2024 – Mar 2025

- 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