## **Shawanwit Poomsa-ad**

+765-409-3830 · spoomsaa@purdue.edu ·

### **EDUCATION**

Purdue University

B.S. in Mathematics

July 2024 - Present

4.00 GPA

relevant classes: Big data in Physics; Advanced Problem Solving

Khon Kaen Wittayayon School, Thailand

Secondary School Diploma

Jan 2019 - Aug 2022

4.00 GPA

#### **TECHNICAL EXPERIENCE**

### Physics Datamine, Purdue University High-Energy Physics Research Group

Aug 2024 - Present

- Selected as part of a cohort "rediscovering" the Higgs Boson from scratch using elementary techniques.
- Focused exposure to the rigorous particle physics and statistical tools behind experimental physics.
- Conducted manipulation and cleaning of CERN's CMS open dataset through Python.
- Collaborated and gave peer-to-peer expository talks on emerging trends and essential topics.

# Purdue Space Program, Purdue University Astrodynamics Group

July 2024 - Present

- Developed orbital propagator in MATLAB with numerical methods.
- Learned Ansys STK for orbital calculations and modeled a Hohmann Transfer and other common orbits.
- Use of sequential complex programming packages (mainly SCPToolbox) for trajectory optimization.
- Engaged in literature review for a future team project in orbital optimization for asteroid mining.

### **EMPLOYMENT**

# Ministry of Foreign Affairs, Thailand

July 2023 - Aug 2023

- Project Intern (Department of International Organizations)
- Selected as part of a competitive internship program for students interested in Thailand's role in the UN.
- Delivered written reports and presentations on key global issues such as food insecurity and tuberculosis.
- Performed qualitative research for department information sessions.
- Shadowed diplomats and officials during the lead up to the United Nations General Assembly.

### **KEY COMPETENCIES**

**Data Science and Statistics** 

Python Julia R

**Computing and Computational Methods** 

MATLAB C/C++ GNU/Linux

Calculus, Linear Algebra, and Differential Eqns

**Basic Knowledge of Lean Theorem Prover** 

### **SOFT SKILLS**

Communication

Documentation, Presentation, and Public Speaking

Research and Knowledge Acquisition

Languages

Fluent Conversational

English Thai Lao