

Kirin Sarangkasiri

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EDUCATION

University of Massachusetts Amherst, MA - *B.S. in Computer Science*

Expected Graduation Date: May 2023

Undergraduate Coursework: Problem Solving w/ Computers; Programming w/ Data Structures; Introduction to UNIX; Introduction to C; Programming Methodology; Computer Systems Principles; Reasoning Under Uncertainty; Introduction To Computation; Introduction to Algorithms; Operating Systems; Artificial Intelligence; Applications of Natural Language Processing; Calculus II; Multivariate Calculus; Intro Linear Algebra

SKILLS

Languages: Python; C++; C; Java; JavaScript; SQL

Libraries: Python: Pandas, SciPy, Selenium, OpenCV; JavaScript: React.js

Software: IntelliJ IDEA; PyCharm; Jupyter Notebook; Code::Blocks; Notepad++

EXPERIENCE

Agoda, Bangkok - *Anomaly Detection, Intern*

June 2021 - August 2021

STUMP Detection

- Designed and integrated into the system, a new algorithm to detect anomalies in a time series, based on the STUMP algorithm, comparing each subsequence in the series against each other
- Wrote algorithm from scratch, based on the descriptions of the STUMPY Python library, but optimized for the specific use case of comparison of daily trends
- Edited existing backend to accommodate a non-model algorithm of detection

Feed Ingredients Trading Group, Bangkok - *Data Science and Quantitative Model, Intern*

July 2019 - August 2019

A member of Charoen Pokphand Group, Thailand's largest private company and one of world's largest conglomerates. This department focuses on using data science to make optimal decisions on crop purchases to feed livestock.

Stock Chart Turning Point Scorer

- Created a model with Python to predict whether the current point in a stock chart is a turning point, which indicates highest/lowest stock value, by giving it a score
- Used metrics from historical data, including days passed before turning point, prices of prior turning points, and a combination between these metrics for the chart user

Corn Cob Image Processor

- Wrote Python image processing program, using OpenCV, for consumers to determine quality of a corn cob
- Processed an image of a corn cob to provide height, width, volume and surface area data to field employees

University of Massachusetts Amherst, MA - *Undergraduate Course Assistant*

August 2020 - May 2021

- Provide students and faculty support for the courses "Problem Solving w/ Computers" & "Introduction to Computation"
- Help students learn Java and computational logic, and grade coding projects and exams

AWARDS

- **Bronze Medal, Thailand Olympiad of Informatics** (2018): Learned and used fundamental algorithms in a national competitive programming environment
- **National Representative, International Young Physicists' Tournament** (2018): Used knowledge of physics and data collection and analysis skills as a Team Member of Team Thailand in an international physics debate competition
- **Thai-CERN Student Exchange Program** (2019): Thai government grant to visit world's leading research center