

Ha Le

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Research Area: Social Computing, Human-Centered Machine Learning, Natural Language Processing, Data Mining and its applications to the identification of high-risk online communities.

EDUCATION

BSc. Honours Computer Science and Mathematics

Saint Peter, MN | Jun 2022

GUSTAVUS ADOLPHUS COLLEGE

- (CS) GPA: 4.00 , (Mathematics) GPA: 3.93
- Advisor: San Skulrattanakulchai

RESEARCH

UNDERGRADUATE RESEARCH STUDENTS | COMPUTER SCIENCE

Gustavus Adolphus College | 2021

- Advisor: Louis Yu
- Identify the group of successful streamers on Twitch.tv and deduce potential factors that can contribute to the popularity of streamers, including their initial profile and streaming activities. Build a predictive model to forecast the growth of channels, and devise a schematic strategy to attract followers.
- Results can be read here: [paper](#) | [presentation](#)

UNDERGRADUATE RESEARCH STUDENTS | MATHEMATICS

Gustavus Adolphus College | 2020

- Advisor: Jacob Siehler
- Use an adapted version of Conway's pagoda function and deduction techniques to address the Port-and-Sweep Solitaire version equivalent of the solitaire army problem in one dimension, and conclusively prove that no army can advanced more than 9 cells beyond the line.
- Results can be read here: [paper](#)

TEACHING EXPERIENCES

MCS DEPARTMENT | COMPUTER SCIENCE TEACHING ASSISTANT

Saint Peter, MN | Jan 2019 - now

- Assist professors during lectures and lab sections, provide help for students during night tutoring sessions, as well as be in charge of project and homework grading.
- List of courses taught:
 - MCS-177 & MCS-178: Introduction to Computer Science (I) & (II)
 - MCS-287: Principles of Programming Languages
 - MCS-284: Computer Organization

MCS DEPARTMENT | CALCULUS NIGHT TUTOR

Saint Peter, MN | Jan 2019 - now

- Provide help and homework recommendation for students during night tutoring sessions.
- List of courses taught:
 - MCS-119: Pre-Calculus
 - MCS-121 & MCS-122: Calculus I & II
 - MCS-222: Multivariables Calculus

WORK EXPERIENCES

FPT SOFTWARE | DATA ENGINEER INTERN

Hanoi, VN | May 2021 – Jul 2021

- Designed and implemented a algorithmic trading algorithm that can effectively recommend profitable stock codes in Vietnamese trading market. The process involves crawling data from the stock market from past 10 year (2010-2020), researching workable indicator and doing sentiment analysis on newspaper's pieces.
- The final model uses Deep-Q Neural Network implementation from tensorflow library and it can predict relatively well the selling, buying and holding time for blue-chips stocks.

RENESAS ELECTRONICS | DATA SCIENTIST INTERN

Hanoi, VN | Jul 2021 – Sep 2021

- Given the user manual of a particular Renesas' microcontrollers in pdf format, extract and calculate the internal structure, including information about the interfaces, registers and base addresses.
- Build an IP-XACT format generator that can convert the information of a microcontroller from a xlxs file to a xml file in IP-XACT format.

ACTIVITIES

NOBEL CONFERENCE 57: DATA SCIENCE | STUDENT HOST

Saint Peter, MN | Feb 2021 - Oct 2021

- Take part in the organization and promotion of the Nobel Conference 2021.
- Work with Professor Francesca Dominici during her stay at Gustavus, including preparing her schedule and promote her research and publication.

GUSTAVUS CODING CLUB | FOUNDING MEMBER

Saint Peter, MN | Dec 2018

- One of the first six members of the first coding club in Gustavus.
- Participate in the organization of several activities such as: coding competition, ICPC, Nobel Conference, ...

SKILLS

Languages: Python, SQL, R, Kotlin, C++, LaTeX**Frameworks:** Pandas, Numpy, Tensorflow, PySpark, NLTK**Courseworks:** Algorithms, Complex Analysis, Real Analysis, Applied Statistics, Programming Languages, Compilers, Scientific Computing, Abstract Algebra**Additional Coursework:** Natural Language Processing, Machine Learning, Reinforcement Learning (Coursera)