Siming He

3465 Sansom Street | Philadelphia, PA 19104 | +86 13991129959 | siminghe@seas.upenn.edu

EDUCATION

University of Pennsylvania | School of Engineering and Applied Science | Philadelphia, PA

May 2024

Bachelor of Science in Engineering in Computer and Information Science

Relevant Courses: Programming Languages & Techniques, Math Foundation of Computer Science, Ruby on Rails, Calculus, Algorithms and Data Structures*, Automata, Computability, and Complexity*, Python Programming*, Linear Algebra*

Ridley College | St. Catharines, Ontario, Canada

June 2020

Honors: Student with Best Academic Performance (2018-2020) Cumul

Cumulative GPA: 4.0 / 4.0

TECHNICAL SKILLS

Experienced Programmer (Java, Python, Ruby, OCaml, C++, GNU Octave, HTML, CSS, JavaScript)

- Specialized in using APIs and libraries (Java Swing, JDBC, NumPy, TensorFlow, scikit-learn, Matplotlib, Ruby on Rails)
- Programmed five applications for different clients and analyzed various data using machine learning

RELEVANT EXPERIENCES

Independent Developer, Website Developer | Xi'an, China

November 2020 – December 2020

Developed a scheduling tool using Ruby on Rails with devise, cocoon, simple_form, fullcalendar, and aws-sdk-s3 gems

Oakville Immigration & Education Consulting Inc., Software Developer | St. Catharines, Canada

June 2020 - July 2020

- Studied WeChat Mini Program Development Framework (WXML, WXSS, and JavaScript)
- Designed and developed a program to assess and score clients' profile for skilled immigration

Independent Developer, *Software Developer* | St. Catharines, Canada

September 2019 – February 2020

- Consulted a client and proposed solutions to client's requirements
- Designed database, UML diagram, GUI by using OmniGraffle, Adobe Illustrator, and Photoshop
- Developed an algorithmic trading application using Java and gained client's comment of "a useful and impressive tool"

Independent Developer, Game Designer | St. Catharines, Canada

January 2018 – May 2018

Programmed a 2D platform game using Python and Pygame

Pinan Medical and Healthcare Management Co., Ltd., Data Analyst Intern | Shanghai, China

July 2017 – August 2017

Collected and cleaned millions of records of patient data in a 3-member team using Python and NumPy

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Access Engineering, Teacher | Remote

September 2020 – Present

Planned lessons on web development and taught 20 high school students

Ridley College Student Union, Prefect | St. Catharines, Canada

September 2019 – June 2020

- Organized school events and school assembly in a 10-member prefect team
- Led activities to promote spirits and well-being of school community and delivered speech to 500 students and faculties

Ridley College VEX Robotics, Lead Programmer & Team Captain | St. Catharines, Canada September 2017 – January 2020

- Tutored 3 programmers in VEX programming about syntax, sensors, and basic robotic control systems
- Led a team of 3 builders to build and program multi-functional robots for competition
- Developed an API using Python to plan paths and generate code for robotic autonomous mode

RESEARCH

Cambridge Center for International Research, Researcher | Remote

June 2020 – August 2020

- Learned Philosophy in Business: Corporate Responsibility, Strategy, and Ethics from a Cambridge professor
- Wrote and published "Impact of Blockchain Applications on Trust in Business" in iBusiness Journal

Independent Research, *Artificial Intelligence Researcher* | St. Catharines, Canada

January 2019 - December 2019

- Adapted OpenPose and developed LSTM neural network that translates videos of sign language into text
- Wrote a paper that will be in a publication by The International Press of Boston, publication date to be determined
- Awarded US regional finalist of the 2019 S.-T. Yau High School Science Award