

QING YANG

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EDUCATION

Harvey Mudd College, Claremont, CA

Expected May 2023

Bachelor of Science, Computer Science, GPA: 4.0

Relevant Coursework: Data Structures and Program Development (ongoing), Discrete Mathematics (ongoing), Principles of Computer Science, Programming Practicum, Introduction to Computer Science, Probability and Statistics, Linear Algebra, Mechanics, Multivariable Calculus

SKILLS AND PUBLICATION

Skills Python, Java, Tkinter, Git, GitHub, Matplotlib, MATLAB, Darknet Neural Networks.

Publication Santichaivekin Santi, Qing Yang. 2020. *eMPress: A Systematic Cophylogeny Reconciliation Tool*. Bioinformatics (BIOINF-2020-1780). Submitted.

WORK EXPERIENCE

Research Assistant, Harvey Mudd College, Claremont, CA

May 2020 – July 2020

Developed a graphical user interface for empress application using Python and Tkinter. Empress is a software tool that uses the duplication-transfer-loss model to find the most probable way two species lived together in the past.

Collaborated with a team of four students and two professors to come up with the design and requirements of empress application.

Used Git/GitHub for source control and participated in rigorous code review process throughout application development.

Marketing intern, Cambodian Organic Agriculture Association, Phnom Penh

May 2017 – Jun 2017

Conducted interviews at local pepper farms and organic shops.

Produced posters, videos, newsletters and a marketing plan for COrAA.

Learned communication skills, research skills, and advertising skills.

Marketing intern, Wings College Preparatory Academy, Singapore

Mar 2017 – May 2017

Aided in Singapore expansion: held two info sessions, responded to inquiries from potential students, published marketing articles on social media platforms.

PROJECTS

Underwater Robotics

Sep 2019 – April 2020

Improved the navigation system for autonomous underwater vehicles to accomplish game tasks. Utilized Python, Darknet Neural Networks, and YOLO real-time object detection command line tool.

Study Cloud Website Development

Sep 2019 – March 2020

Worked to improve the structure of the topic organization tree using JavaScript D3 library and HTML. Study Cloud is an unpublished website for sharing student resources.

PATENTS

Eye surgery recovery mask [cn201821124047.9]

July 2018

It allows patients to redress the wound without taking off the mask to avoid contamination. It also reduces swelling and relieves the pain through cold compress and partial massage.

Reconfigurable power strip [cn201821125891.3]

July 2018

The multi-layer nested power strip comprises a four-stage telescopic rod and four layers of power strip with jacks on their sides. The number of jacks can be changed based on users' needs.

Energy-saving trash bin [cn201821123995.0]

July 2018