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Personal Website: jackyt.netlify.app | Github Profile: https://github.com/jackyt1010

EDUCATION

City University of Hong Kong(CityU)

-Master of Science in Applied Physics Sep 2023 – Aug 2025 Hong Kong

Peking University

- Summer Semester Exchange Student(The Peking University Summer GLOBEX Julmester Program 2021)

Attained CGPA for the Exchange Program(Reference): 3.68/4.00

Attended Coursework: Applied Analysis in Engineering Sciences (87/100, A-)

The Hong Kong Polytechnic University(PolyU)

-Bachelor of Science with Honours in Computing, Minor Degree in Applied Mathematics Sep 2018 – Aug 2022 Hong Kong

THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學

July 2021

Beijing

Attained Honour: SECOND CLASS HONOURS, DIVISION 1

Scholarship/Certification: HKSAR Government Scholarship Fund-Talent Development Scholarship 2020/2021(Category: Innovation, Science and Technology), Future Star 2021-Wenw ei Scholarship Selection Activities(Shortlisted Certification of Good Performance), PolyU UG Summer Research Abroad Sponsorship@MIT 2020/21 Shortlisted Finalist, Li Po Chun Cha ritable Trust Fund Undergraduate Scholarship 2019/20, Wong Tit-Shing Student Exchange Scholarship 2019/20(Offer Received, Declined)

SKILLS

Programming Languages: JAVA, C/C++, Python 3

Web Applications: HTML, CSS, PHP, JavaScript, React.js/Vue.js, Python Flask, RESTful API

Database Software: MySQL, MongoDB

Version Control: Git

Linux: Bash Scripting, System Administration

Machine Learning: Python Machine Learning Libraries, eg. NumPy/Pandas/Scikit-Learn/TensorFlow/PyTorch, Jupyter

Notebook, Mathematical and Statistical Modelling, Data Analysis and Feature Engineering

Miscellaneous: Docker, Cloud Computing Services, eg. Amazon Web Services(AWS)/Microsoft Azure//Huawei Cloud,

Microsoft Excel/Word/PowerPoint/Power Query/Power BI, LaTeX, Thesis Writing, CI/CD

Languages: English (Proficient), Mandarin (Proficient) and Cantonese (Native)

WORK EXPERIENCE

Institute of Advanced Executive Education, The Hong Kong Polytechnic University

-Part-time Teaching Assistant(Supervised by Prof. Brian Kei)

1.Performed teaching assistant service for the trainee and handling their enquiries who enrolled the HKMA ECF fintech course co-organized by the university and the Hong Kong Institute of Bankers(HKIB)

2.Reviewed the Lab manual of the HKMA ECF fintech course about the

Blockchain/Distributed Ledger Technology .etc and tested the execution of Linux Shell Script, NodeJS and Web Front-End User Interface to ensure the Lab experimental activities are conducted properly





Sep 2022-Feb 2023 Hong Kong

- 1. Performed Security Vulnerabilities Scanning and Web Application Penetration Testing for theInternet assets owned by the company's client(multinational group corporation)
- 2. Validated and Reproduced the discovered Vulnerabilities of the client's web application system
- 3. Archivied the validated Vulnerabilities and composing/documenting the penetration testing report for the company's client

Department of Computing, The Hong Kong Polytechnic University



-Research Student Assistant (Mainly Collaborated with Mr. Liu Yunfei / Supervised by Dr. Henry Chan, Associate Head and Associate Professor PolyU COMP) June 2022-Aug 2022 Hong Kong

- 1. Conducted current research and literture review on the development work and innovative technologies such as AI, VR/AR and/or advanced computing technologies for the implementation of a hybrid classroom.
- 2. Investigated and conducted physical experiment for the possible integration and configuration of different electrical teaching facilities for being used more innovatively in a hybrid classroom.

Office of the Chief Information Officer, The Education University of Hong Kong



- IT Intern(Programming

July 2021—Nov 2021 Hong Kong

- 1. Assisted with other Internal Department to carry out paper submission form digitalization by designing and creating the frontend layout of digital form, its backend workflow procedure with dedicated tools (WorkFlow First Designer).
- 2. Implemented the automated validation checking of the user submitted input from the created digital form by proprietary scripting language inside the WorkFlow First Designer
- 3.Implemented the email notification function of the developing web application system to first let the user to submit the data which will be entered into the digitalized form which will be displayed on the system and to let the system to retrieve the email of the user to send the notification email to that user's email account by using Java Servlet Page(JSP), JBoss(Web Server), Oracle Database and the Elicpse IDE
- 4. Gathered technical requirements and revised software project User Manual.
- 5. Prepared User Acceptance Testing(UAT) document for system performance testing

RESEARCH PROJECT EXPERIENCE & PUBLICATIONS

Research Project Experience HK PolyU Computing Capstone Research

Project(COMP4913, Fall/Spring 2021-22):

Capstone Project Topic: AI Stylistic and Photorealistic

Videos Generations[1][2]

Capstone Project Supervisor: Dr. Chung, Fu-lai Korris



Conference Proceedings





[1] Tang, Man Kit."An Interactive Neural Network-Based System for Confined Stylization of Product Design". 12 th International Conference on Design and Semantics of Form and Movement 2023: 271-278 (Implemented Project Code and Written Documentation: Github Respository)

Honors & Awards

1. Leaded and Ranked 14/**7091** teams(top **0.002%**, Top 20 teams over the 7091 teams in the World, Top 10 teams over 4605 teams in the Asia Pacific Region, Top 5 teams over 241 teams in the Mainland China(231 teams) and Hong Kong SAR Region(10 teams)) in the 24-hour IEEExtreme 17.0 Global Programming Competition(Event Information Official Ranking)



- 2. First Runner-up(rank: 2/**50**+ participants) in Macau Rookie Hackathon 2023(MOCSCTF: Macau Cyber Security and Capture The Flag Competition)
- 3. Second Runner-up(Rank: 3/20 teams among 6 Asia Pacific Countries/Regions) in Asia Pacific Cyberattack Response Challenge 2023 (Event Information)
- 4. (National Award) First Runner-up in Huawei ICT Competition Global Final(Cloud Track) 2021-2022 (News 1 | News 2 | News 3)
- 5. (National Award) Second Runner-up in Huawei ICT Competition Asia Pacific Regional Final(Cloud Track) 2021-2022 (News 1 | News 2)
- 6. (National Award) Champion in Huawei ICT Competition Hong Kong SAR Final(Cloud Track)2021-2022 (News 1 | News 2 | News 3 | News 4)
- 7. First Runner-up(among 4 final teams shortlisted from 10 teams in different countries/regions including Hong Kong SAR, the United Kingdom and the Mainland China Greater Bay Area, and also the fastest team who completed all incident detection and analysis, response) in 1st Cybersecurity Blue Team competition in Hong Kong for the High-end Education institutions 2021 (News)
- 8. First Runner-up(Theme: New Generation Technology, Ranked 2/15 among the final shortlisted teams from 60 participating teams) in The Hong Kong Techathon 2021 (Attained Award list from PolyU website)
 - 9. Leaded and Ranked 4/21 teams(Third Runner-up) among 9 universities from Hong Kong SAR and Macau SAR in The PwC's HackaDay Capture the Flag Competition 2020 (News)
 - 10. First Runner-up(Rank: 2/69 teams) in The Hong Kong Cyber Security New Generation Capture the Flag Challenge 2020(Tertiary Institution Category) (Result from CTFtime) (Attained Award list from PolyU COMP website) (News 1 | News 2 | News 3 | News 4)



















ORGANIZATION & LEADERSHIP EXPERIENCE

Google Developer Student Club – HK PolyU (Homepage 1 | Homepage 2)

Google Developers

Sep 2020 – Aug 2021 Hong Kong

- -Founding Core Management Team Member
 - 1. Being shortlisted by Google to organize online meetings with other team members for event management and discussion
 - 2. Promoted the information of the club to campus staff/students and public via social media platform

 $HK\ PolyU\ Capture-the-Flag(CTF)\ Computer\ Security\ Team(\underline{Homepage})$



Hong Kong

Sep 2019-Aug 2020

Hong Kong

- 1. Competed in the PolyU CTF Qualifier Contest 2019 and being ranked as top 6+ contestants in order to be shortlisted to join the team
- 2. Attended and Received Regular Training on Computer System and Network Security (Supervised by Dr. Haibo Hu and Coached by Mr. Kong Chun Ho)
- 3. Being selected to Represent PolyU to participate and compete in different **Cyber Security Competitions**

HK PolyU ACM Programming Team



-Team Member 1. Being selected by Department of Computing, PolyU to join the team and Received

Training on Data Structure, Algorithm, Competitive Programming(Supervised by

Dr. Richard Lui, Dr. Ken Yiu and Coached by Mr. Shan Jian, Mr. Xiating Ouyang)

2. Completed the Online Competitive Programming Training problems with C++ (Online Training Platform Profile)

Technical Project Experience

An Information Storing and Retrieving System for Student and Course Registration Records (Grade for this course work: **100**/100)

1.Created the RESTful API endpoints of the system and Implemented the functionalities of the RESTful API endpoints with Python Flask which will be used to be connected to MongoDB to let the user to send the HTTP requests to retrieve and modify the information of the students and courses which are stored in the system

2. Created the Docker containers which consist of Prometheus (Monitoring System) and Grafana (A Web Application System for Data Visualization) respectively to collect and store time- series data of the Docker container which consists of the Python application to monitor the performance of the container

3.Used prompQL to query the collected metrics from Prometheus inside the Grafana container Created dashboards and charts in Grafana to visualize the data

4.Used the Pytest Library (A library for Unit Test) to write a Python Application to perform Unit Test for the system by sending HTTP requests and verifying the content of the HTTP responses which are made by the Flask application

A Course Registration System for the enrolled student and the system administrator of a university(Overall Grade for the course(COMP2411 Database Systems): A)

- 1. Wrote a GUI program with Java AWT and Java Swing libraries to create the layout of that GUI program
- 2. Implemented the functionalities of the Java GUI program to let the student to register their account of the system, view and modify their personal information, view the information of the course, register the course and to let the system administrator to create/retrieve/update/delete the information of the course and student, modify the enrollment information of the student, list the top student(s) with the greatest number of course(s) of each listed student registered and list the top student(s) with the highest average grade(s) of each listed student registered
- 3. Inserted the data of the information which is related to the course, student and the enrollment information of the student to the Oracle Database Used Oracle JDBC driver to let the Java GUI program to connect to the Database
- 4. Wrote Oracle SOL in the source code of the Java GUI program to create, retrieve, update and delete the stored records of the course, student and the enrollment information of the student in the Oracle Database

Personal Blog Site (Website Link: https://jackyt.netlify.app)

- 1. Created the site with the static site generating software (Hugo) and used the cleanwhite theme as the template code to generate the HTML, CSS, JavaScript files
- 2. Modified the template code in the HTML files from the cleanwhite theme project in order to change the layout of the generated website
- 3. Modified the settings which are specified in the YAML files which would be used by Hugo to generate the website with the specified settings and let the website to be displayed with the settled layout
- 4. Locally Containerized the cleanwhite theme project and tested to generate the website which would be able to be accessed by the localhost(Domain Name) with Docker and docker- compose
- 5. Created the Github respository, uploaded the files inside the cleanwhite theme project, modified the YAML file which will be used to create the docker container in the Github with the function of the Github Action and GithHub
- 6. Created the domain name jackyt.netlify.app for the deployed website in

Github with the DNS service in Netlify Hosted the website by Netlify

- 7.Created the HTML file and modified the HTML files which is used to include JavaScript Code of the LaTeX rendering engine KaTeX to display the Mathematical Formulas in the Markdown posts which are written by LaTeX 8. Used the Giscus (A comment system powered by GitHub Discussions) to generate the parameters to be included in the template code of the website to let the GitHub Discussions search API to find the discussions which are associated with that website
- 9. Set the parameters in the YAML file which would be used by Hugo, Created the HTML file and included the template code which would be used to retrieve the values of the parameters in the YAML file, accessing the JavaScript code which would be able to be accessed on the website giscus.app and letting the UI of the Giscus and the comments which were made by the visitors to be displayed
- 10. Added the template code in the HTML files from the <u>cleanwhite theme project</u> to include the created HTML file to let the UI of the <u>Giscus</u> to be displayed in the posts on the website in order to let the visitors would be able to write and submit comment via the Giscus UI
- 11. Created the <u>Markdown</u> files, wrote some texts in these files and uploaded the markdown files to the <u>Github respository</u> which would be created as the posts on the website to let the visitor to read