

Yu-Tang, Shen

<https://yutan9.github.io/>

EDUCATION

Chinese University of Hong Kong
Bachelor of Science in Computer Science

2015 - 2019

National University of Singapore
Exchange Program

Jan 2017 - Jun 2017

PROJECTS

Circulating Tumor Cells Recognition

Jul 2019 - Nov 2019

While working at Cellmax, I cooperated with Acer on developing a neural network on recognizing circulating tumor cells (CTCs), and my job was to prepare the confirmed CTCs image for training. I first tried the convolution matrix to detect the edges, but the low intensity from the microscope led to unsatisfying results. I then adopted the Watershed segmentation algorithm, and the results were accurate enough for the scientist in the medical lab to identify CTCs and to further label the training data.

Report Generating Application

Aug 2019

I developed a report generating application based on Python while working at Cellmax. One of my colleague was responsible for making the medial report, while sometimes human error can sabotage the credibility of the report. I developed an application that can automatically fetch data and fill into corresponding blanks in different templates, which not only eliminated the human error but reduced the time on generating a report from at least 30 minutes to less than a minute.

Database System

Sep 2019

I designed a database system in BCNF while satisfying the CAP regulation on data storage. The project is finished in MySQL, and additionally I completed a front-end interface with Vue.js and PHP for my colleague to access data.

Motion Retargetting

2018 - 2019

The project aims at retargetting a motion from a skeleton to another. My teammate and I tried utilizing non-linear optimization function from Matlab to retarget each joint to a corresponding point in 3D space. And we further adopted a GAN network developed by NVIDIA, Style GAN, trying to achieve a more natural result by generating a series of frames that the proportion of the skeleton meets our need.

WORK EXPERIENCE

Machine Learning Assistant Engineer, Winbond

Jan 2021 - Present

I am working as an ML assistant engineer at Winbond, responsible for promoting Industry 4.0. I am assigned to a project developing NLP models to assist the marketing department to respond to customer inquiries.

Software Engineer, Cellmax Life

Jul 2019 - Nov 2019

I was responsible for database design, desktop application development, neural network development, and automatizing procedures for different departments.

Data Analyst Intern, Shopee

Jul 2018 - Aug 2018

My job included tracking performance on push notifications, crawling price data, and cleaning data using Python and Excel.

TECHNICAL STRENGTHS

Computer vision and AI

Python, TensorFlow, R, OpenCV

Software engineering

HTML, CSS, jQuery, Vue.js, React.js, Github

Database system

SQL, MySQL

Operating system

Ubuntu, CentOS, Shell script

EXTRACURRICULAR

Volunteering

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| Volunteered at Sri Lanka, teaching primary school students English | 2016 |
| Volunteered in Guangxi, China teaching middle school students math, Chinese, and English | 2016 |

Sports

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| Second place of Inter College Volleyball Game at NUS | 2018 |
| Winner of the Taiwanese Student Association Spring Basketball Game at CUHK | 2017 |
| Third place of E-League Basketball Game at CUHK | 2016 |
| Winner of the Inter College Volleyball Game at CUHK | 2016 |
| Winner of the Taiwanese Student Association Fall Basketball Game at CUHK | 2015 |

Programming

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| Competed in the Cathay Pacific Hackathon | 2017 |
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