

CUI Chengzhi(Cody)

Contact Information: +852 93511463| treaus216@gmail.com

PROFESSIONAL EXPERIENCE

2024.02 – Present	ICBC (Asia) (Operation Management Department)	Officer
● Data Analysis	Provided data extraction and data cleaning services using SQL for 6 departments, wrote over 20 scripts to support 16 different business of the company, including inward & outward, e-Account Express, cross-border payments, anti-money laundering, HKMA data analysis, and others; Calculated the fluctuations in average overtime hours per employee, average working hours per employee, and the global growth rate based on the year-over-year growth trends of historical data;	
● Automation Design	Developed a VBA automation script to process nearly 100,000 inward data records and 100,000 outward data records on a monthly basis. The script was used to categorize manual and automated transaction volumes, as well as provide detailed breakdowns of volumes and year-over-year growth for personal banking, global wealth management, mobile banking, finance systems, and other business lines. This replaced the manual data cleaning and processing work done by the department, improving efficiency and accuracy;	
● RPA Design	Designed an RPA architecture to improve the efficiency of manual processing of the inward business across departments. Collaborated cross-departmentally to optimize the RPA design solution;	
● Process Design	Independently completed the process mapping for the remittance fee and reporting processing business, with comprehensive understanding and familiarity of the department's operations. Provided a comprehensive guidance plan for the relocation of the business from Hong Kong to Foshan;	
● Technical tools	Proficient in using Python and SQL. Skilled in building models using machine learning and deep learning algorithms.	
2022.09 – 2023.01	Huawei (Hong Kong Research Center)	Design Verification Engineer
● Function Development	Participated in the GPIO GUI automated test software development project of Huawei (Hisilicon) Department and completed the functional development of GPIO GUI;	
● Chip Customization	Provided professional scripting services for chips from different chip founder-factories of the company using python, including cell replacement, extraction and routing of chip packages with different protocols;	
● Chip Design	Responsible for Q&A of the chip, drawing schematic and layout according to Q&A, designing the rules of the chip using Perl language, and debugging the rules;	
● Technical tools	Proficient in using Python along with libraries such as Tkinter, Numpy, and Pandas for developing functionalities and writing scripts. Skilled in using Perl, DRC to design and optimize chip design rules.	

INTERNSHIP EXPERIENCE

2023.05 – 2023.07	China Securities Co., Ltd.	Quantitative Analyst
● Optimization Model	Model and calculate daily returns, cumulative returns, and Sharpe ratio stocks for 53 stocks including Apple, etc., and build multiple models (such as linear regression, multiple regression, genetic algorithm, ant colony algorithm, Cross-Sectional Momentum, lasso, etc.) to improve and optimize the Sharpe ratio of the portfolio. My personally created model achieved a Sharpe ratio of 1.4, demonstrating excellent portfolio optimization capabilities.	
● Technical tools	Proficient in using tools such as Python and scikit-learn for data processing and model construction, achieving efficient quantitative analysis and strategy optimization. In-depth understanding and flexible application of technical tools to improve work efficiency and accuracy.	
2022.06 – 2022.07	Hong Kong Center For Construction Robotics	Research Assistant
● Market Research	Established the Hongjian team to conduct comprehensive market research, conducting market surveys on companies in Singapore, Taiwan, Japan, Germany, etc., and conducting in-depth research on domestic company Bozhilin Robotics Co., Ltd. By analyzing industry pain points, identifying opportunities, and exploring technology and solutions, provided support for the project.	
● Achievement	Responsible for the design, installation, and technical work of the vision and laser ranging modules, providing technical support for research projects. Won the first prize of 2022 Science and Technology Summer Camp team.	
2021.04 – 2021.08	Kingsoft Office Software Co., Ltd.	
Domestic government and enterprise department Software Test Engineer (2021.05 – 2021.08)		
● System Testing	Responsible for functional testing of business systems, including reading and checking the B2B system (order system, covering materials, leasing, authorization, etc.) and ensuring consistency of testing documents. Represented the business department to be responsible for functional testing and UAT testing of the LTC system project, tracked and promoted the progress of testing, communicated with backend personnel in a timely manner, and reported bugs found during testing. Successfully completed 30 system tests in the project.	
● Template Design	Created an Excel template for material orders based on requirements, used to summarize the leasing software situation of other companies in the system and visualize the data. Proficient in using Excel for data processing and visualization, improving work efficiency.	
R&D department (Headquarters) Software Test Engineer (2021.04 – 2021.05)		
● Software Testing	Responsible for test case design and execution of different versions of WPS on PC, including WPS Enterprise, WPS Personal, WPS 2012, and WPS 2019. Used Python to write test scripts to comprehensively verify the functions of each version, locate and track bugs and missing features of the product during testing.	
● Automated Testing	Completed software testing tasks using RPA, successfully completing about 700 test cases. Proficient in Python, VBA, and RPA tools, efficient in writing test scripts and integrating them into the	

software testing process, improving testing efficiency.

PROJECT EXPERIENCES

2022.01 – 2022.10	Internet of Things Feasibility Study	Project Manager
● Project Description	As part of the Master's final year project on 'Internet of Things Feasibility Study', responsible for designing and implementing the IEEE1451 API, which is an important branch of the laboratory.	
● System Management	Built ChirpStack web and mLinux using Python and Linux, and constructed PostgreSQL database, Redis, and Mosquitto.	
● Data Collection	Collected TEDS data from multiple different intelligent sensors according to standards, and designed API interface using Python.	
● Protocol Application	Using IoT protocols such as LoRa or NB-IoT to record the characteristic parameters of sensors to MCU and transmit them to the network server, ensuring that the data is viewable.	
2022.03 – 2022.04	Predicting gene sequence tags based on machine learning models	Team Member
● Data Preprocessing	Extracted data from 16,830 sequences, each containing more than 500 base pairs, using Python and preprocessed the data using one-hot encoding.	
● Model Training	Trained gene sequences using models such as SVM, Decision Trees, and CNN to find the optimal model, and uploaded predicted labels to Kaggle for evaluation.	
● Achievement	After training with different models, CNN achieved the best performance with a score of 72.	
● Project Link	https://www.kaggle.com/competitions/ee54342022/leaderboard	
2020.01 – 2020.07	Detection and identification of sows based on Kinect	Project Manager
● Shape Recognition	Utilized the region growing algorithm to accurately recognize body parameters of sows in different environments, improving the accuracy rate	
● Data Measurement	Successfully achieved pig detection and displacement analysis in harsh environments, ensuring system stability and reliability.	
2018.05 – 2018.10	Design based on sound effect algorithm and optimization of DSP implementation	Project Manager
● Algorithm Application	Participated in a research project instructed by a professor, collected normally distributed data using chaos theory, and designed a Simulink reverberation model for simulation.	
● Optimization	Performance Successfully created a reverberation algorithm to generate random numbers and integrated the code into the Matlab Simulink simulation module, achieving reverberation performance optimization.	

EDUCATION

2021.08 – 2022.10	City University Of Hong Kong	Master of Science in Multimedia Information Technology
● Related courses	Topics in Image Processing, Machine Learning, Data Mining	
2016.09 – 2020.07	Shanxi Agricultural University	Bachelor of Science in Electronic Information Engineering
● Related courses	Java programming, C program, Matlab simulation technology	
● Honors	2019-2020 Second-class scholarship (Top 5%); 2018.08 International Underwater Robot Competition Engineering Project Team-Oil Pipeline Inspection Technology Challenge won the third prize in an International Competition; 2018.08 Electronic Design Competition won the third prize at Provincial Level; 2017 College Student Mathematical Modeling Contest won the Award for Successful Participation in an International Competition; 2017 Mathorcap University Student Mathematical Modeling Challenge won the award for successful participation in an International Competition; 2017 the May 1st Mathematical Modeling League won the Successful Participation at National Level	

SKILLS

● Language Skill	Fluency English skills (CET-6 477, IELTS 6); Cantonese
● Computer Skill	Python, JavaScript, MATLAB, C, Java, Perl, Shell, Tcl, SQL, linux, Word, Excel, PPT and SPSS, Office