Pin Wang

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EDUCATION

University of California San Diego, US Sep. 2024 - June. 2025
- Master of Science in Business Analytics
- Major Courses: Business Analytics, Collecting and Analyzing Large Data, Customer Analytics

University of Southampton, UK Sep. 2019 - Nov. 2020
- Master of Science in Systems, Control & Signal Processing
- Major Courses: Machine Learning, Computer Vision, Signal Processing, Image Processing

Wuhan University, CN Sep. 2014 - Jul. 2018
- Bachelor of Science in Electromagnetic Wave Propagation and Antenna
- Major Courses: C, Circuit Analysis, Signal & System, Digital Signal Processing

EMPLOYMENT

Bytedance Technology Co. LTD, Shanghai CN Dec. 2020- Jul. 2023

Software Development Engineer in Test | Interactive Entertainment R&D
- Designed the standardized test methodologies (flow, power consumption, etc.) for quality control; worked with engineering developers to develop architectural design solutions for the ecommerce product lineup
- Responsible for the user experience quality assurance; quantitatively analyzed complex quality problems of the business and provided detailed solutions to the key points of business & technical characteristics
- Monitored and implemented the product experience quality assurance projects; assessed project risks, produced diagnostic reports, and drove problem resolution

Project 1: Power Analysis and Optimization of Mobile Devices based on User Experience
- Investigated the underlying current data (battery-stats, battery-historian, Battery Manager Service, Instruments) and power consumption data of the mobile system; selected & packaged the best current data acquisition method
- Predicted the heat degree of the equipment by fitting the packaged current data through regression function; established standardized models to realize the dynamic prediction and intelligent optimization strategy for the temperature rise of online users' devices; achieved 10%+ long-term user retention rate

Project 2: Network Testing Capability Modeling
- Beginning with examination of business-related network issues to summarize the types of network problems and perspectives from which they are identified. Then establishing a systematic set of SOP includes standards for testing and problem identification aimed at enhancing network assessment and troubleshooting capabilities.
- The project segmented the network quality measurement system from several perspectives: network response speed, load size, and stability. It set benchmarks for a variety of network issues, such as domain name non-convergence, low connection multiplexing rate, resource waste, etc.

Project 3: Long-Link Product Experience Diagnosis Analysis based on User Conversion
- Established the core links with user penetration and business info; conducted multi-dimensional separation of the necessary scenarios (equipment, crowd, environment, etc.) to find the key nodes where conversion rate gaps exist
- Performed correlation analysis to observe the change trend between business indicators and user experience and determined the optimal distribution domain; diagnosed performance problems and did product optimization accordingly, and achieved the GMV growth

Project 4: Display Page Complexity Evaluation and Optimization in APP
- Divided the page complexity into three main aspects: network complexity, rendering complexity, and resource quality complexity and did complexity evaluation; conducted directional optimization to achieve page "load reduction" and improved the page loading experience

Project 5: Domain Name Experience Diagnosis and Optimization based on Global Distributed Node Dial-Test
- Used http/ping/dns/traceroute to monitor the success rate and performance of domain name access
- Obtained the probe device info and the network info; analyzed the time consumed in each phase to diagnose key nodes where quality problems occur and determined the optimization direction based on the problem nodes (optimize the configuration of Trusted Technology Partner (TTP) and Internet Data Center (IDC))

ACADEMIC PROJECTS

Realized the Linkage Between Emotion Prediction APP and Video Collection APP in Android 2022
Researcher, Supervisor: Professor Jack Mostow (CMU)

- Realized the development of Android client, real-time recording and uploading of users' facial data, along with algorithms for recognizing and predicting facial expressions.
- Automated the evocation and linkage between the prediction app and facial feature data acquisition app by setting class Name or component with intent in Android Studio using JAVA
- Made Python models and libraries available on Android clients by introducing a Chaquopy dependency; used Pandas to build a table of facial data and recorded as Json files

Scene Recognition based on Image Processing 2019
Researcher

- Implemented a classification algorithm using Tensorflow framework based on the given 15 classes of 100 training images; used the pre-trained VGG19 algorithm built by Keras on 2012 ILSVRC ImageNet dataset to tune and add four full link layers with 4096, 1024, 12, 15 nodes, and achieved the 91% classification accuracy in 2985 test images

ADDITIONAL INFO

Computer Skills: Python, Matlab, C, Golang
Languages: Chinese (native speaker), English (fluent)