Jianan Dingqian

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Education

Teachers College, Columbia University, New York, NY

Master of Science in Learning Analytics

Northeastern University, Boston, MA

Bachelor of Science in Electrical and Electronic Engineering

GPA: 3.6

Work Experience

Industrial Bank, Guangzhou, China | Data Analyst Intern

March - May 2021

- Leveraged Python, SPSS, and Excel to process extensive customer data, including credit card transactions, spending habits, and lending records
- Transformed data into visualizations to enhance team understanding of customer patterns
- Conducted market research, competitor analysis, and customer behavior analysis, proposing suggestions for improvement

Vicor Corporation, Andover, MA | Firmware Engineer Co-op

January - June 2019

- Developed embedded system firmware for a power product, implementing multi-threaded task scheduling and error recovery
- Collaborated with hardware team to debug and optimize systems, improving reliability and security
- Created test suites in C and C# for comprehensive system testing and product validation

- Assisted in designing, simulating, testing, and validating vehicle electronic control systems
- Managed component selection, procurement, and testing, documenting results in technical reports
- Troubleshot automotive electronic systems using CAN bus communication protocols and tools

Projects

EDM Analysis: Academic Performance and Family Background

September - December 2021

- Utilized EDM (Educational Data Mining) to analyze data on student performance, family background, and higher education aspirations
- Applied logistic regression models and F-tests to assess the relationship between family background and students' desire for higher education
- Proposed actionable measures to improve educational outcomes for students from diverse backgrounds

Emotion Recognition Training Device

September - December 2018

- Developed a Python-based game for children with autism to recognize real-time facial expressions
- Built a device using Raspberry Pi to run the game and wirelessly connected a camera for realtime photo capture and transmission
- Utilized TensorFlow as the algorithm execution environment and Microsoft Face API to analyze facial expressions in the returned photos

VGA Display Controller

January - April 2018

- Designed an FPGA-based VGA display with high-resolution and high frame rate video output
- Implemented custom graphical interfaces and image processing algorithms in Verilog assembly language

Skills

Programming Languages: Python, R, C, C++, C#

Tools & Technologies: SPSS, Excel, MATLAB, Embedded Systems

Languages: English (Fluent), Mandarin (Native)