YINGJIAN(JAMES) DING

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OBJECTIVE

Software Engineering position utilizing my skills in Computer Science

EDUCATION

CARNEGIE MELLON UNIVERSITY, Pittsburgh, PA, USA **May 2014**
Master of Science, Electrical and Computer Engineering GPA: 3.82
PORTO BUSINESS SCHOOL, Porto, Portugal **August 2013**
Master of Business Administration (MBA) GPA: 3.70
NANJING UNIVERSITY OF SCIENCE & TECHNOLOGY, Nanjing, China **June 2009**
Bachelor of Engineering, Electrical and Mechanical Engineering GPA: 4.00

SKILLS

Programming Language: C/C++, Java, Python, JavaScript, Assembly, Unix Shell/Bash, VHDL
Cloud Computing & Big Data: Amazon EC2, S3, Hadoop, MapReduce, Hive
Database: mySQL, Oracle
Data Processing & Analysis: STATA, EXCEL (Risk Solver), R, SAS, SPSS, MATLAB
Modeling &Simulation: MATLAB (Simulink), LINGO, LabView
API Tools: Jsoup, OpenMP

WORK EXPERIENCE

CARNEGIE MELLON UNIVERSITY, Pittsburgh, PA
***Teaching Assistant,* Electrical and Computer Engineering Department** **Fall 2013**

- Instructed around 40 students in graduate course Machine Learning for Signal Processing
- Organized discussion and recitation towards algorithm and implementation including **image processing**, **speech recognition**, and **musical signal analysis**.

SONAE CORPORATE, Porto, Portugal
***Intern & Consultant,* Sonae Retail Corporation** **Summer 2013**

- Evaluated and prepared white paper on data visualization tools, and self-service Business Intelligence
- Mapped out a strategy for Enterprise Data Governance Framework

BEIHANG UNIVERSITY, Beijing, China
***Research Assistant,* National Key Lab for Inertial Navigation Technology** **2009—2012**

- Developed hardware and software for GPS/INS navigation system, using Altium Designer, Xilinx ISE, Simulink, and Visual ***C++ MFC***
- Analyzed the data stability, consistence, and navigation system reliability, including ANOVA, exception handles, cross-validation and sensitivity analysis, mostly using matlab
- Publication of *"Study on EKF-Based Optimal Phase-Adjusted Pseudorange Algorithm for Tightly Coupled GPS/SINS Integrated System"* ISKE, *Volume 123*, pp 553-558

PROJECT EXPERIENCE

Shake-Free Screen Design and Implementation, *Build18 Project & Android development* **Jan 2014**

- Developed an ***Android app*** which can digitally compensate the shake (around 1Hz) of cellphone body to keep the content stable, by collecting the signals from accelerometers and gyroscopes
- Implemented inertial navigation and ***Kalman Filter*** algorithms in ***Java***

Distributed Embedded Elevator Design, *Real-time distributed embedded system project* **Oct—Dec 2013**

- Designed an Elevator using embedded system designing methodology: functional requirement, sequence diagram, state chart, and traceability documents
- Designed and programmed the most critical module — dispatcher, using ***Java***
- Established Rate Monotonic Scheduling for cooperation among multiple of modules
- Tested system using test methodology: unit test, integration test, and acceptance test

C Programming Projects, *Introduction to computer system (15213)* **Sep—Dec 2013**

- Implemented a Unix shell program supporting job control and I/O redirection (process control & signal).
- Designed a high-preformance malloc program dynamically allocating storage
- Programmed a HTTP proxy that communicates over network connections, and caches web objects

Java HTML Parser Design, *extracting information project* **Dec 2013**

- Designed and programmed the convenient Web Parser using Jsoup (Java Library) which can automatically collect daily prices for digital cameras in sear.com and taobao.com

Bank Credit-Worthiness Prediction Algorithm Design, *Machine Learning & Finance* **January 2013**

- Built classifying models with Decision Tree Method, Support Vector Machine, KNN and etc.
- Selected features based on information gain and entropy analysis
- Improved the **Decision Tree Method C4.5**, and proposed a new and more flexible method

LEADERSHIP ACTIVITIES

- Campus Piano Club (Beijing,China): Co-Founder, President, Held several Piano Concerts
- Solving Rubik's Cube in 30s