

Xiaoying Huang

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EDUCATION

- UNIVERSITY OF CALIFORNIA SANTA CRUZ (UCSC), USA** *Sep.2017-- Present*
- M.S. in Computer Science
- PEKING UNIVERSITY (PKU), CHINA** *Sep.2009-- June 2011*
- M.Eng in Electronic and Communication Engineering
- SUN YAT-SEN UNIVERSITY (SYSU), CHINA** *Sep.2002-- June 2007*
- B.S in Computer Science and Technology, Mechanics

SKILLS & LANGUAGES

- Skilled: Java(Proficient), SQL, PHP, HTML5, JS, JSON , Python, C, C++, Verilog HDL.
- Tools: RsetFul API, Maven, Apache Tomcat, MySQL, MongoDB, Ubuntu, Amazon AMS.

PROJECTS

- Smart Home Solutions** <http://xyhuang.net/smarthome/index.php> *Feb. 2017 – May. 2017*
- **RestFul** API for smart home system to control electronic devices automatically.
 - Define the architecture to support **LWM2M** specification including four interfaces and payment module.
 - Develop database to store data for the system by **MySQL** and **MongoDB**.
- Implementation of Massive Face Recognition Algorithm based on Hadoop** *May. 2016 – Aug. 2016*
- Develop a simple and effective **face detection** system based on the massive images.
 - Enhance efficiency while reading massive files by introducing **Hadoop** slicing into small files processing.
 - Packaged the mass of small files into large files for storage and processed in Hadoop system using **Sequence File method**, and reduced the pressure on the mass storage of small files to HDFS.
- Face Detection Acceleration using CPU and FPGA Heterogeneous System** *Sep. 2009 – Feb. 2010*
- Integrated classic face detection software on CPU based on haar-like features and **Adaboost** algorithm by referring to open source code.
 - Implemented parallel processing RTL using Verilog for high cost weak classifiers part in **FPGA**.
 - Achieved an average of 5 times speedup ration compared to pure CPU based on FDDDB benchmark.
- Multi-depot Vehicle Routing Problem with Limited Number of Vehicles (m-MDVRP)** *Dec. 2006 – July2007*
- Proposed a newly improved **Tabu search** algorithm.
 - Converted m-MDVRP into m-VRP by dividing customers into small groups, built reasonable m-VRP mathematical models and improved by adding multiple initial solutions (MIS) and dynamic Tabu length (DTL).
 - Obtained global optimal solution in large domain of feasible solutions by increasing the number of iterations.

WORKING EXPERIENCE

- China Aerospace Science and Technology Corporation** *Jul. 2011 – Jan.2016*
Software Engineer, Team Lead of Storage & Data
- Lead cross-function teams to carry out large-capacity solid-state memory(SSD) research, included ultra high-speed serial bus technology, **LDPC(20Gbps)** encoding and decoding technology.
 - Achieve storage capacity from 1Tbits to 4Tbits above, and enhance the data speed from 5Gbps to 20Gbps, enable **flexible file management** system, while the need to ensure low power and anti-radiation.

HONORS & AWARDS

- **Honorable Mention** in Mathematical Contest in Modeling, USA (2007 & 2006)
- **National First Prize** in Mathematical Contest in Modeling, China (2005)
- **Outstanding Student Cadre**, School of Data and Computer Science, SYSU, China (2004)
- Excellent Student **Scholarship**, SYSU, China (2003 & 2005 &2006)