Shibo Hou

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EDUCATION

NORTH CAROLINA STATE UNIVERSITY (NCSU)
Department of Electrical and Computer Engineering
M.S. in Computer Engineering
May 2015 | Raleigh, NC

BEIJING UNIVERSITY OF POSTS & TELECOM (BUPT)
M.S. in Communication & Information System
Mar 2013 | Beijing, China
B.S. in Communication Engineering
Jun 2010 | Beijing, China

LINKS

Facebook: https://facebook/shibo.hou
Github: Expo0911

COURSEWORK

GRADUATE
Software Engineering
Database Management Systems
Algorithms
Internet Protocols
Computer Networks
Computer Performance Modeling
Network Systems and Services
Human Computer Interaction
Wireless Communication Systems

SKILLS

PROGRAMMING
Java • C • C++ • Javascript
MySQL • CSS • HTML • PHP
Matlab • Assembler • LaTeX

OPERATING SYSTEM
Mac OS• Windows • Linux

MATHEMATICS
Mathematical Modeling • Calculus
Probabilities • Stochastic Process
Statistics • Matrix Theory

ALGORITHMS
Excellent with data structure and common algorithms

NETWORKING
TCP/IP • Wireless Networking

PROJECT EXPERIENCE

DATABASE MANAGEMENT SYSTEM Spring 2015 | NCSU
- Designed a database to assist with the administration of University Housing Office. Students can view available houses based on different criteria, check status of lease related requests, invoices, maintenance tickets and parking. Housing staff can view and act on different requests.
- Designed database using E-R model, created database by Oracle MySQL, managed database on Java by JDBC, built a website for Housing Office and students to operate.

SOFTWARE ENGINEERING Fall 2014 | NCSU
- Designed a simple website using node.js, applying bootstrap to create layout and knockout.js to process dynamic content, adding visualization component by d3.js, using grunt to manage build tasks.
- Performed unit testing on mocking the server response from Twitter.

COMPUTER PERFORMANCE MODELING Spring 2014 | NCSU
- Applied Markov process queueing-based models to simulate the general M/G/1 queueing problem in computer & communication systems by C++. Computed performance measures of throughput and delay for given queueing system with different number of servers and different queueing priorities.

INTERNET PROTOCOLS Fall 2013 | NCSU
- Implemented go-back-N and selective repeat automatic repeat request (ARQ) scheme to a simple Peer to Peer system with a centralized index, in which a concurrent server is capable of carrying out communication with multiple clients. When peers join in this P2P system, they can add their local file names to file list in the server, and query, request to download files from some destination peers over TCP.

WORK EXPERIENCE

CAPGEMINI CONSULTING
Business & Technology Solution (BTS) Team
Associate Consultant | Dec 2012 – Aug 2013 | Shanghai, China
- As a management consultant, assisted BTS Department win the $1,000,000 bid from China Vanke Co., Ltd to reconstruct its database management system.
- As a technical consultant, helped China Vanke Co., Ltd locate the vulnerabilities of its database system, update its master database and management platform using SAP NetWeaver Java.

POTEVIO INSTITUTE OF TECHNOLOGY CO., LTD.
Joint Coding Modulation Diversity Project
Internship | Dec 2010 – Jul 2011 | Beijing, China
- Built and debugged link level simulation system and several paramount modules (such as channel estimation, turbo coding) by C Language
- Proposed a new fast LMMSE channel estimation algorithm (using Matrix theory) under Rayleigh fading channel, verified its eminent performance.

AWARDS

Sep 2011	”Outstanding Student Leaders” Award of BUPT
May 2010	The Mathematical Contest in Modeling, Meritorious Winner
Jul 2009	”Freescale Cup” National Intelligent Car Competition, 3rd Prize
Apr 2009	The Mathematical Contest in Modeling, Meritorious Winner
Dec 2007	Beijing Mathematics Competition for University Students, Bronze Medal