YUGUANG LI

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OBJECTIVE

A position in the field of web or software development with special interests in using and learning all kinds of new and innovative cutting-edge techniques

EDUCATION

Boston University, College of Engineering Boston, MA September 2011 - May 2013
Master of Engineering in Electrical Engineering, GPA: 3.77/4.00
Master's Project: "Cloud-based Cyber services for Smart Lighting"

Xi'an Jiaotong University *Xi'an, Shaanxi, P.R. China* *September 2006 - July 2010*
Bachelor of Engineering in Automation Engineering, GPA: 85/100; SiYuan scholarship
Thesis: "The Wind Turbine Failure Predictions and Diagnostic Monitoring"

EXPERIENCE

RapidSOS,LLC May 2014 - Present
Software Engineer *Boston, MA*

· Writing testings for telephony stuff with SIPp (in progress)
· Working mainly on the backend using python and Django frameworks and telephony stuff
· Participated to implement the REST APIs and QA testing for the backend with Django REST framework
· Arranged for the Asterisk telephony server behind Nginx using HTTPs
· Designed the Class-based automated message generate modules for Interactive Voice Response(IVR)
· Implemented the telephony applications on asterisk server by python and Asterisk REST APIs
· Implemented the interconnection library to interacts with the partner's APIs

The Laboratory of Networking and Information Systems June 2013 - March 2014
Research Assistant on Prof. David Starobinski's team *Boston University, Boston, MA*

· Helped to research mainly on topics of Networking and Cyber Security
· Established a lab curriculum for graduate course EC521: Cyber Security
· Designed the course contents: SQL injection, password cracking, nmap, network attacks and Snort
· Arranged for the lab environment with Kali Linux and Metasploitable2 under VMware Workstation

The Network-based Complex System Control Lab October 2010 - July 2011
Research Assistant on Prof. Dejun Mu's team *Northwestern Polytech. Univ., Xi'an, China*

· Worked mainly in mathematical modeling, algorithms design and simulations in Matlab
· Established a dynamic transmission algorithm based on feedback and buffers on the server-side
· Proposed the probability model of the E2E and SCF mechanisms
· Simulated and Verified the above transmission systems

PROJECTS

Lab Curriculum Design for Computer Cyber Security June 2013 - September 2013
The Laboratory of Networking and Information Systems *Boston University, Boston, MA*

· Designed the lab curriculum for a graduate course: EC521 Cyber Security
· Chosen the lab environment and two VMs: Kali Linux and Metasploitable
· Tested all the designed labs and drafted the lab details
· Presented a paper according to this project at CISSE 2014, June, San Diego,USA

Cloud-based Cyber services for Smart Lighting April 2012 - April 2013
Master's project *Boston University, Boston, MA*

- A Master graduation project for an intelligent lighting system design using Java
- Compared the existing Cloud services and came up with an optimal solution: Amazon Web Service
- Designed multithread chat server and socket communication between client and server
- Designed and implemented the front end using HTML5, CSS3 and Javascript
- Deployed the web application onto Cloud with sample database and tested all the functions

Outlier Color Identification for Search and Rescue September 2012 - December 2012
Course of Digital Imaging Processing *Boston University, Boston, MA*

- Characterized the Mathematical Model of the images as Markov Random Model with Gibbs distribution
- Designed and implemented Outlier Color Indentification algorithm based on the Markov Model
- Applied the algorithm to different kinds of sample images and improved the performance

Applications of Accelerometer Network September 2011 - December 2011
Course of Networking the Physical World *Boston University, Boston, MA*

- Used Crossbow MTS400 wireless sensors (TinyOS motes) programmed in nesC
- Analyzed the data packets transfered between Crossbow MTS400 wireless sensors
- Developed the integral algorithm to detect motion of the motes using accelerometer sensor
- Designed and implemented the GUI in matlab for displaying and controlling the motion curve

The Embedded Audio-Video Transmission System for WLAN November 2010 - April 2012
The Laboratory of Network-based Complex System Control *Northwestern Polytech. Univ., Xi'an*

- Proposed a dynamic transmission algorithm based on feedback and buffers on the server
- Implemented above self-adaptive algorithm on the server-side
- Verified the better QoS of the improved transmission system

Packet Reachability of VANET in Bidirectional Road Scenario May 2010 - November 2010
The Laboratory of Network-based Complex System Control *Northwestern Polytech. Univ., Xi'an*

- Proposed the probability model of the E2E and SCF mechanism
- Compared the packet reachability between E2E and SCF
- Simulated the models using Monte Carlo method in Matlab

The Wind Turbine Failure Predictions and Diagnostic Monitoring October 2009 - July 2010
Bachelor's Thesis *Xi'an Jiaotong University, Xi'an*

- Polished and Integrated the existing neural algorithms to the Wind Turbine System
- Designed Failure Prediction and Diagnostic Monitoring control panel by MFC
- Verified the prediction algorithms and system with sample databases for LAN

TECHNICAL STRENGTHS

Compile Languages	Java, C
Scripting & Other Languages	Python, PHP, Javascript; HTML, XML, JSON, CSS
Operating Systems	Linux, Kail Linux, OSs with Unix kernel, Windows
Databases & Tools	Postgres, MySQL; Git, Vim, Matlab, Wireshark, Pentesting Tools
Protocols & APIs	HTTP, HTTPS, SIP, RTP; jQuery, google APIs
Servers & Cloud	Nginx, Gunicorn, Apache2, Tomcat7, Asterisk; AWS, DigitalOcean
Frameworks & Architecture	Django, Strut2, Spring, Bootstrap; REST

PUBLICATIONS

Yansu Hu, **Yuguang Li**, The QoS Research of H.264 Video Transmission in Embedded Wireless LAN, Computer Science(ISSN 1002-137X), vol.38, no.5, pp.83-85, 2011

Panguo Fan, **Yuguang Li**, et al, Packet Reachability of VANET in Bidirectional Road Scenario, 12th IEEE International Conference on Communication and Technology, Nov. 2010