SHITONG (SEAN) ZHU

EDUCATION

Chongqing University of Posts and Telecommunications
2012 – 2016 – Chongqing City, P. R. China
B.Eng., Communications Engineering (ECE)

- Cumulative GPA: 3.67/4.0 – Top 10%
- Supporting Courses:
  – Calculus I/II, Linear Algebra, Probability Theory and Statistics
  – Computer Networking, Wireless Ad-hoc Networks, Fundamentals of Telecommunication, Mobile Telecommunications
  – Signal and Systems, Speech Signal Processing, Digital Image Processing
  – Introduction to Database Systems, Intro to OOP Using Java, Network Programming
  – Digital Circuit Design, Programmable Logic Devices, Practical Electrical Design Automation

PUBLICATIONS

– Working Papers:

- [IEEE NTK] Topology Control in Internet of Things: A Survey, submitted to *IEEE Network*, under review

– Conference Articles:

- [SAC '15] A Source-location Privacy Protection Strategy via Pseudo Normal Distribution-based Phantom Routing in WSNs.
  {Jun Huang, Meisong Sun, Shitong Zhu, Yi Sun, Cong-cong Xing, and Qiang Duan}
  In *Proceedings of the 30th Annual ACM Symposium on Applied Computing* (pp. 688-694). ACM. 2015
- [RACS '15] On Selecting Composite Network-Cloud Services: A Quality-of-Service Based Approach.
  {Minkailu M. Jalloh, Shitong Zhu, and Jun Huang}
  In *Proceedings of the 2015 ACM Research in Adaptive and Convergent Systems*, to appear.

– Journal Articles:

- [JSW '14] A Defense Model of Reactive Worms Based on Dynamic Time.
  {Haokun Tang, Shitong Zhu, Jun Huang, and Hong Liu}
  Journal of Software 9.11 (2014): 2778-2788
- [JCP '14] Propagation of Active Worms in P2P Networks: Modeling and Analysis.
  {Haokun Tang, Shitong Zhu, Yukui Lu, and Jun Huang}
  Journal of Computers 9.11 (2014): 2514-2524

RESEARCH & WORK EXPERIENCE

Chongqing Key Lab of Networking and Information Security @ CUPT
2013.5 – Present – Chongqing, P. R. China – supervised by **Prof. Jun Huang**

- Designed and implemented algorithms regarding routing and topology control techniques in Internet of Things, or Cyber-Physical Systems
- Optimized networked and distributed system design,
- Conducted extensive simulations and experiments under various testbeds.

Software Engineer Internship @ Douban Inc. – *a leading online community in China*
2015.7 – 2015.9 – Beijing, P. R. China

- Implemented new functionalities on server side, conducted Web development under various in using various frameworks
- Designed and tuned Spark/Hadoop scripts processing data on distributed clusters

- Prototyped, implemented and tailored algorithmic details of "Douban New Movie Chart". Check its online version here (in Chinese)

System Administrator Internship @ Bank of Chongqing – *the biggest local bank*

2014.7 – 2014.8 – Chongqing, P. R. China

- Administered Linux nodes on large-scale computing clusters
- Wrote administrative Bash/Python scripts to achieve management automation
- Collected and analyzed traffic data for modeling

SKILLS & ABILITIES

- Experienced in C/C++/Python/Java/MATLAB programming, good comprehension of algorithms and data structures
- Fluent in common design patterns, capable to build full-size software systems
- Strong background in mathematics/statistics, qualified to conduct complex quantitative analysis
- Familiar with mainstream machine learning algorithms and big data tool-chain, capable to implement data processing/algorithm design in a distributed manner
- Fluent in communication/network protocols and common simulation test-beds at research-level
- Team player, excellent oral and writing communication/collaboration skills in English

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HONORS & AWARDS

– Undergrad level:

- **Individual Scholarship for Scientific Innovation** @ CUPT, 2014
- **Contemporary Undergraduate Mathematical Contest in Modeling (CUMCM)** – *Second Prize in Provinces*, 2014
- FLTRP Cup English Public Speaking Contest – *Second Place in Provinces*, 2014
- **Mathematical Contest in Modeling (MCM)** – *Successful Participant,* 2015

– High-school level:

- **National Olympiad in Informatics in Provinces** (high-school version of ACM/ICPC) - ***National Second Prize***, 2009

STANDARLIZED TESTS

- TOEFL iBT – 104/120 (L27/R27/S26/W24) – 104 out of 120 pts
- GRE revised General Test – 321/340 (Verbal 151/Quantitative 170/Analytical Writing 3.0) – each out of 170 pts