Junjie Guan (Jack)

✍ | Dartmouth College, 6211 Hinman
☎ | +1 (603) 277 1196
✉ | gjj@cs.dartmouth.edu
⚡ | https://github.com/jack2684

INTERESTED FIELD

Networking, Distributed Computing,
Web Design, Web Development

EDUCATION

2013 – 2015   **Dartmouth College**
COMPUTER SCIENCE, M.S.

2009 – 2012   **Beijing University of Posts and Telecommunication**
COMMUNICATION ENGINEERING, ,
B.S.

PROFESSIONAL EXPERIENCE

JUN 2014 – AUG 2014

SDE Intern @ Amazon AWS
Builder Tools, Package Builder Services

1) Implement the Auto-Unprune feature to relief customer from tedious manual procedure.
2) Implement pacakge build history API as strech project.

MAR 2014 – PRESENT

Senior developer @ Dali Lab
ArtxChange

1) Implement the bussiness logic, including the customer roles, access control, art gallery and partner system.
2) Develop plugins such as the meta data export plugin

A marketplace that connect artists, buyers and non-profit organzaions. Artists sell artwork while also fundraises for innovative, socially beneficial projects, which is beneficial to both artist and the society.

SEP 2013 – MAR 2014

Software Developer @ Tiltfactor, Dartmouth
Metadata Project

1) Develop full-stack games (i.g, StupidRobot), and collect meta data from user's input.
2) Develop plugins such as the meta data export plugin
3) Fix any issue listed in bug tracker (Asana). Cooperation with other programers around the world using Git.

Granted from National Endowment for the Humanities (NEH), a open source, internetbased system for augmenting access to archival records.
Url: http://www.metadatagames.org/
Repo: https://github.com/jack2684/mg-game

SEP 2012 – FEB 2013

Research Assistant @ NetLab, Tsinghua University
DCloud: Deadline Guaranteed Cloud Computing

1) Design a new datacenter resource allocation mechanism, by considering deadline into job scheduling;
2) Build thousands of lines of C++ simulations program;
3) Implementation on a 16-machine cluster, writing controling program with Python and Bash shell;
4) Validating efficiency with Hadoop application using; Java,
5) Try compare with optimal solution using IBM Cplex;

Increase job throughput by 30~50% comparing to state-of-art, submitted to ACM SIGCOMM 2013.
A related former project where I contribute publication: Publication: Dan Li, Jing Zhu, Jianping Wu, **Junjie, Guan**, Guaranteeing Heterogeneous Bandwidth Demand in Multi-tenant Data Center Networks, accepted by IEEE/ACM Transactions on Networking 2014

Research Assistant @ Innovation Project Center of BUPT
SIDES: Scalable Intelligent Distributed Emergency System

   1) Propose the idea of a decentralized self-organize wireless-based emergency system that generates real-time evauacation strategy to save lives in fire harzard,
   2) Design the the distributed protocol.
   3) Conduct simulation on C++ program, and implement in Zigbee wireless nodes using C.
Shorten evacuation by 50% comparing to normal strategy, Won first prize as National Class Innovation Project.

Publication: **Junjie, Guan**, Yanyi Wu, Jinming Ma, Tao Li, Chunlei Xie, Yuli Mo SIDES: Scalable Intelligent Distributed Emergency System, accepted by IC-NIDC2012

PROJECT IN COMPETITION

DEC 2011 – MAY 2012

Team Leader @ Microsoft Imagine Cup 2012
UpAround Social Platform

   1) Proposed the idea of a location-based social platform, and initiated a technique team of four.
   2) Manage the product development and presentation.
   3) As lead programmer, built a full-stack social platform on .Net framework.
   4) Design and develop a highly-interactive UI using javascript/jQuery, html5 and css3.

Gained the 3rd prize in Software Design China Zone (6%).
Youtube Url: http://goo.gl/jwzWQq

OTHER WORK

SUMMER 2012

Undergraduate @ Future Network Lab of BUPT
Status-Based Content Sharing Mechanism for CCN

Reduce overheads and increase transfer rate by aournd 30% in Content-Centric Network by pre-determining a host based on source status. Then built a experiment network based on CCNx using C.

Publication: **Junjie, Guan**, Xudong Wang, Yu Xia, Tao Huang, Liang Wei Status-Based Content Sharing Mechanism for Content-centric Network, accepted by ICCT2012

APR 2011 – MAY 2011

Undergraduate @ Internet Research Department Center of BUPT
WAP Topology Property Analysis: Comparison With WWW

   1) Developed a multi-thread web crawler using Python.
   2) Keep recording statistics for weeks using mySql.
   3) Analyzed the topology characteristics of WAP, e.g. degree distribution and clustering coefficient.