Junfan Tian

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TECHNICAL SKILLS

- Languages: Java, C#, Python, JavaScript, Go
- Express.js, Spring MVC, AngularJS
- REST API design and development
- OOD & System Design

- Databases: MySQL, SQL Server, Mango DB
- Node.js, jQuery, Ajax, JSON, JDBC
- Solid in data structures and algorithms
- OS: Windows, Linux, Mac OS X, Android

PROFESSIONAL EXPERIENCE

Full Stack Software Developer, Dr. Shuai Huang's Group at UW, Seattle, WA

09/2016 - Present

<u>Data Question Answering System</u> – A **web based data analyzing application** that provides: data signature extraction, algorithm inference, question prediction and answering, supervised learning and question understanding, etc.

- Responsible for the design, development, implementation and deployment of the web application.
- Designed and developed RESTful web services and APIs, integrated server-side logic with front-end elements.
- Defined and maintained the database to ensure high performance and responsiveness to requests from users.
- Leveraged Python RAKE library and Google's Word2Vec to perform NLP in the QU module.
- Trained the system with 100,000 datasets from UCI data repository, StackExchange and DBLP.
- Redefined the requirements of the product, improved SQL performance from 50 to 200 QPS.
- Deployed the service at AWS EC2, supervised day-to-day operations to ensure a prompt and efficient service.

Carrier Technical Management Intern, BlackBerry Ltd., Bellevue, WA

06/2015 - 12/2015

- Collaborated in an agile team providing technical support and solutions to various carriers and clients.
- Completed two major projects: BlackBerry PRIV US launch (AT&T, T-Mobile).
- Excelled in rapid reproducing and collecting logs of technological issues for assigned projects, assisted in resolving over 50 sev1 issues (about 17% of the total sev1's).
- Provided additional support to the T-Mobile team, shortened the Automation Test time by 3 days.

Management Trainee - Data Engineer, China Vanke Co., Tianjin, China

07/2013 - 07/2014

- Analyzed large-scale business data with various statistical models and data visualization tools.
- Developed several APIs to implement statistical methodologies, increased 10% data processing rate.
- Conducted project feasibility research and predictive analysis, worked with other teams to make business plans.

PROJECT EXPERIENCE

Online Supplier & Order Information Management System (MEAN Stack web application)

- Designed and implemented an online application that provides a listing and status of suppliers and orders.
- Used MongoDB for data manipulation, added database slaves to improve read performance by 30%.

Delivery Route Search Algorithm for Amazon "Last Mile"

- Analyzed 1,000 records from ArcGIS, extracted 4 most likely factors that could affect delivery difficulty.
- Proposed a delivery difficulty algorithm, validated the algorithm through experimental simulation studies.
- Designed a route search algorithm based on the delivery difficulty algorithm, reduced delivery time by 15%.

EDUCATION

College of Engineering, University of Washington, Seattle, WA

09/2014 - 06/2016

M.S. in Industrial & Systems Engineering

College of Management and Economics, Tianjin University, Tianjin, China

09/2009 - 07/2013

B.S. in Industrial Engineering