

Career Objective

Currently working as *Web Developer* at *CG Max Design*. Passionate and skilled software engineer specializing in **Web Service Development, Data Retrieval, and Data Visualization**. 4 years programming experience and 2 years professional hands-on software development experience. Looking for **full-time Software Engineer** opportunities with my skills, responsibility and innovation, **starting immediately**. Learn more on *my website*.

Work Experience

Web Developer	CG Max Design Corporation	Aug 16-Current, New York, NY
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Search Words Autocomplete on E-commerce Platform

- Implemented *N-Gram* Library and Statistical Language Model with *MapReduce* framework based on data from Wikipedia to *MySQL* database. Deployed multi-node *Hadoop* cluster over *Docker* on a single machine.
- Achieved Real-Time Auto Completion by querying data through *jQuery* and *Ajax* from database.

Real-time Stock Monitor Application

- Developed a web page to visualize real-time stock data with *Redis*, *Node.js* and *D3.js*.
- Implemented data storage layer with *Cassandra* to store time series data and built data pipeline using *Spark*.
- Deployed salable cluster in *Docker* and improved performance to process larger dataset using *Kafka*.

Software Engineer	VideoMining Corporation	May 15-Jul 16, State College, PA
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Shopper Tracker Data Pipeline on Amazon Web Services

- Built shopper tracker Wi-Fi data pipeline on *AWS*, streaming real-time locations of each shopper to *DynamoDB* and *Redshift* in *EC2* instance.
- Implemented video tracking algorithms and compressed video to *JSON* files and stored dataset in *MongoDB*.
- Optimized PoS query models for trajectory-transaction data association and visualized transactions in *Tableau*.

OmniSensr Health Metric Application

- Collected and reported health metrics of OmniSensr with different intervals through *MQTT* broker.
- Sent metrics from OmniSensr to *AWS IoT thing shadow* to get delta messages with multi-threads.
- Parsed delta messages in *JSON* format and monitored heartbeats to guarantee the desired working status.

Android App for Wi-Fi Based Shopper Tracker Calibration

- Clients can import custom in-store floor maps, add pins on visited positions and subscribe RSS from *MQTT* broker. App was successfully tested and ultimately increased the accuracy of Wi-Fi localization by 8%.
- Analyzed the brands of shoppers' devices by MAC address *Restful* API, visualized the trajectories of shoppers.

Part-Time Software Developer	OneMenu L.L.C.	Nov 14-Feb 15, State College, PA
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OneMenu App Supporting Cross-Platform Project

- Contributed to customer payment notification implementation with *Twilio* and *Gmail* APIs.
- Deployed instances in *AWS Beanstalk*, implemented restaurant confirmed notification with *Interfax* and adopted *Braintree* as transaction platform. Improved drivers' real-time locations module and decreased 33% of latency.

Relevant Skills

- Programming:** Java, Python, JavaScript, SQL, HTML, CSS, Git, \LaTeX , Node.js, jQuery, D3.js, AngularJS
- Tools:** AWS (DynamoDB, EC2, S3, RedShift), Docker, MongoDB, Hadoop, Django, Tableau
- Experience:** Data Mining, IoT Platform, MapReduce, Distributed System, Redis, Spark, Cassandra, Kafka

Education

Pennsylvania State University	University Park PA, May 2015
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- M.S. in Electrical Engineering and minor in Computational Science

Nanjing University of Posts and Telecommunications	Nanjing, China, June 2013
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- B.Eng. in Electrical Engineering