Boston MA

KARL KWON

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EMPLOYMENT

Software Engineer, Lead	**in4mation insights, Boston**	**03/2017 – Present**

- Develop large-scale Python/Django web applications for market research analytics; design in-house data visualization and DB schema; deliver to Coke Japan, Coke Korea, Chick-fil-A (cfa.mix4cast.com) on AWS EC2.
- Design and build the media optimization platform from scratch in JavaScript/Python/Django/Postgres; successfully delivered to IQVIA for various clients.
- (Python, Django, Postgres, AWS, CentOS, JavaScript, D3js)

Data Visualization Architect	**EPE Innovations, Dallas**	**08/2016 – 01/2017**

- Developed the interactive data visualizations of geospatial data using JavaScript/D3.js/SQL.
- Redesigned and integrated new dashboards and business intelligence delivered to PwC.

Research Assistant, PhD	**University of Houston, Houston**	**08/2011 – 08/2016**

- Created and developed ScholarPlot from scratch that scrapping Google Scholar data and integrated with open datasets of NSF, NIH, NASA to visualize it at a glance in PHP, SQL, D3.js - http://www.scholarplot.com/
- Developed the data visualization app and components for the project of Toyota Settlement Safety Research. - http://subjectbook.times.uh.edu/
- Wrote Python, R to statistically analyze datasets for publications and government open datasets.
- Published several top international conferences papers on IEEE and ACM.

Research Intern	**Northwestern University, Evanston**	**08/2011 – 08/2016**

- Implemented the modules for comparative analysis features and improved the backend data intake codes from Google Scholar in PHP, JSON; reduced server load 30%.

Senior Software Engineer	**TmaxSoft, Seoul**	**01/2006 – 10/2009**

- Led a core banking system that increases global transactions coverage by 40% and developed an integrated interface to diverse banking and investment legacy systems.
- Developed enterprising software in finance and insurance fields in Java2, J2EE, EJB, Oracle, WebLogic.
- Implemented a finance management system to drive performance with consistent financial and operational information, leading to a 150% performance improvement.

EDUCATION

Houston, TX	**University of Houston**	**Aug 2011 – Aug 2016**

- Ph.D. in Computer Science (Dissertation: Scalable Data Visualization Methods for Academic Careers)
- M.S. in Computer Science (Thesis: Interfacing Information in User Studies with Mixed Methods)

Seoul, Korea	**Sejong University**	**2006**

- B.S. in Software Engineering. In-major GPA: 3.9.
- Coursework: Operating Systems; Databases; Algorithms; Comp. Architecture; JAVA;

HONORS/AWARDS

- Best Engineering Poster Award, The Korean-American Scientists and Engineers Association
- Graduate Tuition Fellowship, College of Natural Sciences and Mathematics
- ACM International Joint Conference on Pervasive and Ubiquitous Computing Travel Grant
- Texas Public Education Grant (TPEG) for International Award
- Outstanding Undergraduate Awards Winner 2nd/3rd place, Sejong University

LANGUAGES AND TECHNOLOGIES

- Python; Django; Postgres; SQL; React; JavaScript; Centos; Amazon Web Service; REST API
- Java; C; C++; D3js; PHP, MySQL; Git; HTML; CSS; Panda; Numpy; Linux