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# Yoonsu Park

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## Technical Skills

*Languages:* Python, Java, JavaScript, C, C++, HTML5

*Frameworks/Library:* Tensorflow, Theano, Keras, GraphLab, SFrame, Pandas, Numpy, matplotlib, Scikit-learn

*Machine Learning :* Deep neural network and Convolutional Neural Network, RNN( Recurrent Neural Network ), LSTM( Long Short Term Memory), Q-Learning, Regression, Classification

*Other:* Project management, Microsoft Consulting Service, MS Windows, MS SQL, MongoDB, Git/GitHub

## Project Experience

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**Address image recognition** - <http://blockchain99.github.io/street-address-image-recognition> November 2016

- Decoded and recognized the sequences of digits from the natural images of Street View House Numbers through training Convolutional neural networks (CNN) using tensorflow, python
- Coded to prepare image Data, design Convolution Neural Network architecture and optimized the model by parameter tuning
- Enabled to find the housing number of a specific location in a street as a format of continuous multiple digit characters with 94.7% prediction accuracy from test data

**Smartcab driving agent** - <https://blockchain99.github.io/smartcab> September 2016

- Coded to move agent from start location to destination using enforced learning such as Q-Learning Algorithm using python
- Designed and coded Q-Learning agent using Pygame, game engine and tuned the parameters such as learning rate, discount factor, exploration-exploitation relation to get optimal result
- Achieved 97 success to reach the destination out of 100 trials

**Customer segments** - <https://blockchain99.github.io/customer-segments/> August 2016

- Analyzed product spending data collected for customers of a wholesale distributors and coded to identify customer segments hidden in the data using unsupervised learning techniques
- Found meaningful relationships hidden in their customer base to be deployed in services and products to best meet the demands or needs of customers

**Student Intervention** - [https://blockchain99.github.io/student\\_intervention/](https://blockchain99.github.io/student_intervention/) July 2016

- Implemented the supervised Learning models to predict the likelihood of a student to pass high school final exam and decide the early intervention
- Simulated decision Trees, SVMs, Neural Networks, grid search, selected the optimal model, GaussianNB, in terms of performance and cost, and tuned SVM to set gamma as 0.1.

**Samsung Demand Supply Prediction** <http://www.samsung.com/us/business/> December 2008

- Developed with Microsoft SQL BI(Business Intelligence) solution to enable on-demand changes of business management plans and reflected these adjustments on real time basis
- Created Samsung Electronics Business Intelligence System to enhance the demand prediction accuracy for SCM(Supply Chain Management) by more than 20% with Microsoft BI Platform as S/W Architect

**Samsung GSBN** - <https://v3.samsunggsbn.com/ep/index.do?trayIgnore=Y> March 2005

- Developed GSBN(Global Samsung Business Network) integrated with the Samsung's Partners
- Developed the purchase forecast system to make optimized amount of products to be delivered, seamlessly integrated with ERP and SCM and PRM(Partner Relationship)
- Led the project as S/W Architect and Project Manager.

## Work Experience

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**Teraedu, Inc** – *S/W developer, Co-founder* Seoul, South Korea | November 2012- November 2008

- Designed and developed On-line education application ( System Architecture Design, System performance tuning, DB Schema design based on MOODLE, PHP , JavaScript).
- Created online education Contents for Mathematics and Algorithm and Programming

**Microsoft** – *S/W Architect, Project Manager* Seoul, South Korea | July 2008- July 2001

- Coded application, designed S/W architecture and led IT(Information and Technology) projects for Samsung Electronics, Hyundai Motors, LG Electronics, SK co
- Developed Enterprise Application Integration for web portal system connected with SAP ERP(Enterprise Resource Planning) and SCM(Supply Chain Management)
- Coded applications for Enterprise systems based on MS windows server, MS SQL, BizTalk Server, MS SharePoint.

**POSCO ICT Co, Ltd** – *S/W Developer* Seoul, South Korea | February 2001- March 1999

- Developed web portal, designed the middleware architecture, for which implemented to POSCO
- Coded human resource evaluation system that incorporated new evaluation and compensation structure

**Hewlett Packard Co. Ltd** – *IT Consultant* Seoul, South Korea | February 1997- January 1996

- Coded Web portal for newspaper to publish news contents.
- Consolidated multiple legacy system with HP Unix server and analyzed network traffic and designed network architecture

**PHILIPS Co, Ltd** – *Developer* Seoul, South Korea | January 1996- January 1995

- Developed Multimedia Software for PHILIPS CD-I(Compact Disk Interactive)

## Education

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<b>Udacity</b> - Machine Learning Nanodegree	November 2016
<b>University of Washington and offered through Coursera</b> - Machine Learning Nanodegree	In progress
<b>Graduate School of Sogang University</b> – Completion of MBA course	November 2014
<b>Carnegie Mellon University , Pittsburgh, PA</b> – Advanced Software Engineering Course	August 2001
<b>Pohang University of Science and Technology</b> – Master of Science, Information Technology	February 1999
<b>Seoul National University</b> – Bachelor of Science , Computer Engineering	February 1994

## Honors and Activities

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- Awarded Samsung IT Symposium Grand Prize for GSBN project(Team award),  
Nominated as a best case of e-logistics in ASEM(Asia Europe Meeting )  
as *S/W architect, Project Manager* October 2004
- Awarded Microsoft Excellence Award July 2003
- Demonstrated professional sailing skill and earned the certificate of  
**Yachtmaster** accredited by RYA(Royal Yacht Association) in United Kingdom