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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, Hadoop, Git/GitHub

## Project Experience

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### 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
- Prepared image data, designed Convolution Neural Network architecture and optimized the model by parameter tuning
- Enabled finding of house number of a specific location on a street as a format of continuous multiple digit characters with 94.7% prediction accuracy from test data

### Smartcab driving agent

September 2016

- Coded agent to move 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 parameters such as learning rate, discount factor, exploration-exploitation relation to get optimal result
- Achieved 97/100 success for reaching destination

### Customer segments

August 2016

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

### 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.

### Supply Demand Prediction

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 Supply Chain by > 20% with Microsoft BI Platform as S/W Architect

### Samsung GSBN

March 2005

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

## Work Experience

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### Udacity

San Francisco U.S | January 2017 - Now

- Reviewed Artificial project and Deep Learning project
- Guided to implement AI and Deep Learning system, consulted data manipulation, hyper-parameter tuning and model optimization

### Teraedu, Inc

Seoul, South Korea | November 2008- November 2012

- 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

Seoul, South Korea | July 2001-July 2008

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

### POSCO ICT

Seoul, South Korea | March 1999- February 2001

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

### Hewlett Packard Co. Ltd

Seoul, South Korea | January 1996-February 1997

- 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

Seoul, South Korea | January 1995-January 1996

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

## Education

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**Udacity** - Machine Learning Nanodegree

November 2016

**University of Washington and offered through Coursera** - Machine Learning Nanodegree

In progress

**Graduate School of Sogang University** –Completion of MBA course

November 2014

**Carnegie Mellon University , Pittsburgh, PA** – Advanced Software Engineering Course

August 2001

**Pohang University of Science and Technology** – Master of Science, Information Technology

February 1999

**Seoul National University** – 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
- Awarded Microsoft Excellence Award
- Demonstrated professional sailing skill and earned the certificate of Yachtmaster  
accredited by RYA (Royal Yacht Association) in United Kingdom

October 2004

July 2003