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Yoonsu Park

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Technical Skills

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

 $Frameworks/Library: \ Tensorflow, \ The ano, \ Keras, \ Graph Lab, \ SFrame, \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Scikit-learn \ Pandas, \ Numpy, \ Matplot lib, \ Matplot lib, \ Numpy, \ Matplot lib, \ M$

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

Address image recognition - http://blockchain99.qithub.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://blockchaingg.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-Leaning 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 - <u>https://blockchain99.github.io/student_intervention/</u>

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.

Teraedu online education

November 2012

- Designed and developed online education application to teach mathematics and programming
- Established the private academy to teach mathematics and programming, which is integrated with Teraedu system.
- Achieved automatic contents upload through actual teaching in class room, by which analyzed student progress, provided the optimal contents to the students and incorporated feedback.

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

- 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

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

Udacity - *Machine Learning Nanodegree*

November 2016

University of Washington and offered through Coursera - Machine Learning Nanodegree Graduate School of Sogang University - Completion of MBA course Carnegie Mellon University , Pittsburgh, PA – Advanced Software Engineering Course

In progress November 2014 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

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
- Demonstrated professional sailing skill and earned the certificate of Yachtmaster accredited by RYA(Royal Yacht Association) in United Kingdom

July 2003