# YOONSU PARK

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#### **Objectives**

- Machine Learning Expert: Tensorflow, Pandas, Scikit-learn, SFrame, GraphLab, Numpy, matplotlib and Strong programming skill for Python and Java
- Hands-on experience of Machine Learning, Expertise in Deep neural network and Convolutional Neural Network, RNN( Recurrent Neural Network ), LSTM( Long Shor Term Memory), Reinforcement Learning (Q-Learning), classification, regression.
- Udacity Machine Learning Nanodegree in progress
- Completion of Machine Learning course (MOOC from the University of Washington and offered through Coursera): course of Clustering & Retrieval, course of Classification, course of A Case Study Approach, course of Regression
- Strong and proficient Information and Technology skill through experience in S/W development and System Integration as a Principal Consultant of Microsoft Consulting Services, Project Manager, System Architect, Software developer and programmer based on both MS Windows solutions and UNIX system
- Successful project management experience: Project manager of Samsung Electronics GSBN project awarded as a GRAND PRIZE in Samsung IT Symposium 2004 and nominated as a best e-Logistics case in ASEM(Asia Europe Meeting) 2003
- Web programming Expert: Web Portal programming, Database programming, Distributed Computing and Interface and Integration with BI(Business Intelligence), SAP ERP(Enterprise Resource Planning), SCM (Supply Chain Management) and existing legacy systems
- Strong network and system management skill, hands-on experience of wide range of system administration and S/W development: MS and UNIX Core Infrastructure (Microsoft Tech, Network, Server/PC, HP-UNIX, LINUX and Security), Application Development Infrastructure, Business Process Infrastructure, Business Application Infrastructure
- In-depth knowledge of Computer Engineering, Business and Mathematics through career and education
  - o Master's Degree of Computer Science, POSTECH
  - o Bachelor's Degree of Computer Engineering, Seoul National University
  - Completion of Advance Software Engineering course of Carnegie Mellon University, Pittsburgh, USA sponsored by Korean Government and Certified PSP(Personal Software Process), TSP(Team Software Process) Project Management accredited by Carnegie Mellon University
  - o Completion of MBA of Business school, Sogang University
  - Strong Mathematics knowledge through 3 years experience of Mathematics teaching and contents development in private academy and MOOC (Massive Open Online Course) system development and maintenance.
- Fluent 3 languages (Trilingual Korean, English and French)
- Profession sailing skill RYA(Royal Yacht Association) Yacht Master

# **Skills**

 Machine Learning: Tensorflow, Pandas, Scikit-learn, SFrame, GraphLab, Deep Neural Networks, Convolutional Neural Networks, Regularization, RNNs(Recurrent Neural Networks), Model Tuning, Q-Learning, bias/underfitting & variance overfitting, Learning Curves, Model Complexity, Cross Validation, PCA/ICA, Metric Performance, Model Fitting and prediction, Adaboosting, visualizing data, Clustering, Statistical Analysis, Decision Trees, Regression, Neural Networks , Support Vector Machines, Naive Bayes , K-Nearest Neighbors , feature selection

- Programming: Python, Java, JavaScript, C#, C, C++, HTML, PHP
- Microsoft Products: Windows Server, Active Directory, SQL server, BizTalk Server, Office Products, Visual Studio C#, Microsoft Office, Excel
- IT Infrastructure Optimizing include Network and Security
- Line of Business: ERP, SCM, CRM, KM, Groupware
- Interface Program: BizTalk
- Project Management, Program Management and IT Strategic Planning
- Language: Korean, English, French
- Finance and Business: Accounting, Taxation, Auditing, Business Law, Financial Management, Marketing, Investment, Stock, ETF, Foreign Exchange Trading
- Variety of professional knowledge: Mathematics teaching experience and Liberal Arts knowledge such as French literature. Professional Sailing skill(Earned the Yachtmaster certificate accredited by RYA(Royal Yacht Association) in England)

#### **Work Experience**

11/2008-11/2012 TERAEDU Inc., Seoul, South Korea

- Title : S/W developer, Co-founder
- Responsibility:
  - Developed on-line education S/W (System Architecture Design, System performance tuning, DB Schema design based on MOODLE, PHP, JavaScript).
  - Developed online education Contents for Mathematics and Algorithm, Web programming
  - Educated mathematics, algorithm, programming

### 7/2001- 7/2008 Microsoft, Seoul, South Korea

- Title: Principal Consultant, Project Manager, S/W Architect, S/W developer
- Responsibility: Business Management, Project Management, Microsoft Technology Consulting. S/W architecture
- Designed and Deployed MS server: Windows Server, Active Directory, System Management Server, Microsoft Operation Manager Server.
- Developed application : SQL Server, BizTalk Server, Exchange Server, SharePoint Portal Server, DCOM, Visual Studio
- Developed Enterprise Application Integration software for SK CO. web portal system connected with SAP ERP(Enterprise Resource Planning) and SCM(Supply Chain Management) system. - Duration: 13 months
- Samsung Electronics Logistics Automation System project: Application S/W
  development for Enterprise Application Integration among Samsung Electronics
  PRM(Partner Relationship Management system), Samsung Logistics and
  Customs Clearance Automation System.
  - Applications integration S/W module and web portal development between SAMSUNG electronics and overseas partner companies and logistics companies and based on MS Windows server, SQL database and BizTalk Server) –duration 8 months
  - Delivery time reduce, cost saving.
- SAMSUNG Electronics GSBN project( Global Samsung Business Network) : Samsung Electronics worldwide collaborative portal system to predict the

optimized demand and supply across the globe, including 24 production subsidiaries, 36 sales subsidiaries, and 20 branch offices to facilitate its global business support, based on MS Enterprise Server such as Windows Server, BizTalk Server, Contents Management Server, SQL Server) as a Project Manager Architect, system development for 3 years

Business analysis and development for GSBN Project

- $\circ$  Duration: 06/2003 03/2005
- Job Description: Project Management, Architecture Design and Development of Samsung Global sales portal system. System Development of Interface with SAP ERP and SCM(Supply Chain Management) system. Business Analysis, System Architecture, Web Portal application Development using C# and Java
- Developed business process integration to enable the Samsung's Partner company to input purchase forecast to make optimized amount of products to delivered to their door, seamlessly integrated with ERP and SCM and PRM(partnership management system).
- o Results:
  - Conveyed purchase and sell information between Samsung Electronics and it's partner companies to be registered and maintained at "one Portal"
  - Amplified the prediction accuracy for the demand from partner companies.
  - Achieved fast and optimized Business decision through GSBN, which result in cost reduction, business process automation
- SAMSUNG Electronics Demand prediction system (In order to enhance reliability of decision makings, develop highly reliable business management forecast system of BI solution with Data Mining Tool and Dash board, including 'performance and reliability', 'cube write-back' and 'user convenience')
  - $\circ$  Duration: 01/2008 07/2008
  - Role: Lead Samsung Electronics Business Intelligence project to enhance Prediction Accuracy for the demands for SCM by more than 20% with Microsoft BI Platform as S/W Architect
  - Facts: Developed application with Microsoft SQL BI(Business Intelligence) solution to facilitate action-oriented BI implementation to enable on-demand changes of business management plans and reflect these adjustments on real time basis
  - integrated systematically competitors' information inside SAMSUNG Electronics SCM to support mass amount of data processing on Samsung Electronics' promoted BI(Business Intelligence) platform, which would consist of hundreds of Tera bytes of data from ERP and GSBN(Global Samsung Business Network) systems
  - Developed prediction system for global market movements and worldwide demands for Samsung products using MS SQL Business Intelligence solution
  - o Results:
    - Expedite Big Data search in real time from 7 seconds in memory UI, which saved a lot of DB tuning efforts
    - Achieved time series prediction and multidimensional analysis to search and find meaningful business information through data mining tool
    - Boosted to simulate experiment before full development, resulted in cost saving, risk reduction and find the optimized model efficiently

- Led LG Active Directory (Infrastructure Development based on Windows Server) project
- Designed HYUNDAI Motor system and application
- Led Security consulting for Hyosung Co. Ltd to detect security hole, and consulted security enhancement
- Led Infrastructure optimizing project as a Consultant and/or Project Manager for Korea enterprise customer (Manufacturing, Services industry)
- Consulted S/W Architect for (ERP/SCM/CRM and Infrastructure optimization project for enterprise company SK CO. Samsung, LG, and Hyundai Motors)

#### 2/2001 - 7/2001 ECKOREA Seoul, Korea

- Title: CIO
- Responsibility: S/W Architect for B2B solution for Partner Relationship
  Management solution and Enterprise Application Integration, S/W Design and
  Analysis, S/W Quality Management.
- Java, EJB, CORBA, XML, JavaScript

### 3/1999 - 2/2001 POSCO ICT Co. Ltd (Affiliate Company of POSCO), Seoul, South Korea

- Title: Senior Researcher of POSCO ICT Laboratory,
- Responsibility: Web portal development, middleware design and system architecture design, infrastructure optimization and network architecture upgrade for POSCO
- Used Tool & Skill: Java, HTML, C, C++, JavaScript, WINDOWS, UNIX, SQL

### 1/1996 - 2/1997 Hewlett Packard Co. Ltd, Seoul, South Korea

- Title: Consultant of Computer System Organization
- Responsibility: Unix consulting/ network architecture design. Infrastructure consulting, UNIX system performance tuning
- Used Tool & Skill: C, C++, UNIX network configuration, server configuration

#### 1/1995 - 1/1996 Philips Co. Ltd, Seoul, South Korea

- Title: Developer of Multimedia System Organization
- Responsibility: Multimedia Software Development (Compact Disk-Interactive)

#### **Education**

- 7/2016- Now: Udacity Machine Learning Nano Degree course
- 6/2016 8/2016: Certificate of Machine Learning Course: Clustering & Retrieval
   : MOOC from the University of Washington and offered through Coursera, SCORE(100%)
   ( https://www.coursera.org/account/accomplishments/certificate/7X85N47TALEV )
- 4/2016 5/2016: Certificate of Machine Learning Course: Classification
   : MOOC from the University of Washington and offered through Coursera, SCORE(98.4%)
   (<a href="https://www.coursera.org/account/accomplishments/certificate/NNE9CYRA2AMT">https://www.coursera.org/account/accomplishments/certificate/NNE9CYRA2AMT</a>)
- 2/2016 4/2016: Certificate of Machine Learning Course: A Case Study Approach
   : MOOC from the University of Washington and offered through Coursera, SCORE(96.6%)

# $(\underline{https://www.coursera.org/account/accomplishments/certificate/RDZQK4TBJVTL}\ )$

- 2/2016 4/2016: Certificate of Machine Learning Course: Regression
   : MOOC from the University of Washington and offered through Coursera, SCORE(96.9%)
   ( <a href="https://www.coursera.org/account/accomplishments/certificate/YW2JW3RZ6LTA">https://www.coursera.org/account/accomplishments/certificate/YW2JW3RZ6LTA</a> )
- 11/2013 11/2015 : Graduate School of Sogang University
  - o Completion of International Finance Major
  - o MBA
    - Courses completed: Financial Management, Investment & Trading, Economics,
       Foreign exchange, Accounting Principles, Intermediate Accounting, Advance
       Accounting, Government & Non-profit Accounting, U.S. Taxation, U.S. Business Law,
       Cost Accounting, Information Technology, Business Environment Analysis, Audit.
- 05/2001~08/2001 : Carnegie Mellon University "Advanced Software Engineering Course", Pittsburg, USA.
  - o Sponsored by Korean Government
  - O Course: Software Engineering
    - S/W Architecture, S/W Design, S/W Development Method, S/W Quality Management, Component-based Software Engineering, Testing & Validation, CMM(Capability Maturity Model)
  - 3 months, 50 Hour/Week Full time Course in Carnegie Mellon University. Pittsburg, USA
- 03/1997~02/1999: Pohang University of Science and Technology(POSTECH), Pohang, South Korea
  - o Degree : Master's degree of Science
  - Major: Distributed computing of Computer Information Technology

     Courses completed: Artificial Intelligence, Computer Programming, Network,
     Database, Computer Distributed Processing, Algorithm, Computer Architecture,
     Management Information System.
  - Master's thesis: A component access control method in a bridge-based integrated DCOM(Distributed Component Object Model) and CORBA(Common Object Request Broker Architecture) Environment.
- 03/1988~02/1994: Seoul National University, Seoul, South Korea
  - o Degree : Bachelor's degree of Engineering, Computer Engineering

### **Award and Certification**

- Oct. 2004, Samsung IT Symposium Grand Prize for GSBN project(Team award) Samsung o contributor as a project manager of GSBN project.
- Oct. 2003, Nominated as a best case of e-logistics in ASEM(Asia Europe Meeting)
   ASEM
   contributor as a project manager of GSBN project.
- Jul. 2003, Microsoft Korea of Excellence Awarded.

- Microsoft

• Nov.2002, SK CO. CEO Award of Appreciation.

- SK CO.

Certifications

- Machine Learning Certificate of Washington University through Coursera: Clustering & Retrieval, 2016
- Machine Learning Certificate of Washington University through Coursera: Classification, 2016
- Machine Learning Certificate of Washington University through Coursera:
   A Case Study Approach, 2016
- Machine Learning Certificate of Washington University through Coursera: Regression, 2016
- o Microsoft Certified Professional (MCP BizTalk Server), Microsoft, Jun2002.
- o Microsoft Solution Framework (Microsoft Consulting Services), Microsoft, 2001.
- o PSP (Personal Software Process), Carnegie Mellon University, Aug 2001.
- o TSP (Team Software Process), Carnegie Mellon University, Aug 2001.