Taehoon Kim

http://github.com/carpedm20
carpedm20@gmail.com • +82 (10) 9964-0697

EDUCATION	**Ulsan National Institute of Science and Technology**, Ulsan, South Korea

B.S., in Computer Science & Engineering, Electrical Engineering   Mar 2011 – Aug 2015

EXPERIENCE

Lawrence Berkeley National Laboratory, California, USA
Undergraduate Research Student   Jul 2015 – Aug 2015
- Identify energy use patterns in smart meter data, and relate these patterns to actions of households
- Make baseline models for each household to cluster the households into different groups

Probabilistic Artificial Intelligence Lab, UNIST
Undergraduate Research Student   Sep 2014 – Sep 2015
- Improved Bayesian Online Change Point Detection by Reading Texts
- Food image recognition by combining deep convolutional features and shallow encoded features

Moloco, California, USA
Student Web Developer   Oct 2014 – Jan 2015
- Implement a maximum-likelihood estimation model of the number of users who will download an application
- Build a web visualization of models from a large-scale database with query optimization and a cache system

Naver Labs, Seoul, South Korea
Software Development Intern   Jul 2014 – Aug 2014
- Build a cloud comment hosting service using Django and Angular.js

Mobile Smart Networking Laboratory, UNIST
Undergraduate Research Student   Jan 2013 – Aug 2014
- Optimizing Mobile Video Streaming: From Context-aware Scheduling to Cloud-assisted Caching

PUBLICATIONS

2) T. Kim and J. Choi, **Reading documents for bayesian Online Change Point Detection**, in *Empirical Methods on Natural Language Processing* (EMNLP), Lisbon, Portugal, Sep 2015.

1) T. Kim, D. Lee, J. Choi, A. Spurlock, A. Sim, A. Todd, K. Wu, **Extracting Baseline Electricity Usage Using Gradient Tree Boosting**, in *2015 International Conference on Big Data Intelligence and Computing* (DataCom 2015), **Best Paper Award**, Chengdu, China, Dec 2015.

AWARDS

Best Paper Award, **DataCom 2015**   Dec 2015
Best Paper Award for Extracting Baseline Electricity Usage Using Gradient Tree Boosting

Finalist, **Student Cluster Challenge**   Jun 2014
One of 11 international teams (including MIT, Tsinghua Univ) selected through the preliminary contest

3rd place, **Korea Whitehat Contest 2013**   Sep 2013
Awarded by the Minister of National Defense. Received an award of $8,000

1st place, **Holyshield Hacking Contest 2013**   Nov 2013
Awarded by the President of Catholic University of Korea. Received an award of $1,000.

Finalist, **Asia student Supercomputing Challenge 14**   Apr 2014
One of 16 teams among 82 international teams selected through the preliminary contest

Finalist, **Asia student Supercomputing Challenge 13**   Jan 2013
One of 10 teams among 43 international teams selected through the preliminary contest

Outstanding Graduate Award, **Ministry of Science, ICT and Future Planning**   Feb 2016
Only one selected graduate, awarded by the Minister of Science, ICT and Future Planning

Student Outstanding Contribution Award 2014, UNIST   Dec 2014

Student Outstanding Contribution Award 2013, UNIST   Jan 2014

SCHOLARSHIPS

Global Scholarship for Undergraduate Research Opportunities Program, UNIST   2015
Received $3,000 as a financial support for research internship at Lawrence Berkeley National Laboratory

Academic Performance Scholarship, UNIST   2011 – 2015

National Science and Engineering Scholarship, Korean Student Aid Foundation   2013

PROJECTS **DCGAN, MemN2N, NTM, lstm-char-cnn, visual-analogy, attentive-reader, variational-text**
Implemented 1) Deep Convolutional Generative Adversarial Networks, 2) End-To-End Memory Networks, 3) Neural Turing Machine, 4) Character-Aware Neural Language Models, 5) Deep Visual Analogy-Making, 6) Teaching Machines to Read and Comprehend, and 7) Neural Variational Inference for Text Processing in TensorFlow

Neural Face, *AI that generates face images*
Build a generative model for face images using Deep Convolutional Generative Adversarial Networks and a web demo

Poet Neural, *AI that generates Korean poetry*
Build a generative model for Korean poetry using neural network for Character-level Language and a web demo

ReviewDuk, *Korean sentiment analyzer*
Build a Korean sentiment analyzer using logistic regression and Korean Movie Review dataset

Reverse Engineering, *LINE, KakaoTalk, Between, Ndrive, and Korail*
Reverse engineered 1) LINE, 2) KakaoTalk, 3) Between, 4) Ndrive, and 5) Korail and wrote python libraries

VoxOffice & VoxMusic, *Data Visualization*
A Streamgraph Data Visualization of Film Box Office and Music Chart Ranking

Remote Code Execution, *on UNIST attendance checking devices*
Embedded devices that check attendance cards was vulnerable to MS 08-067. The password of a main DB server for attendance data is extracted by reverse engineering of the attendance checking program

LEADERSHIP HeXA, Computer Security Club, UNIST
President   Aug 2012 – Mar 2013