

Taeho Kim

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RESEARCH INTERESTS

Mobile Healthcare, Internet of Things system, Mobile Computing

EDUCATION

University of Colorado Boulder, Boulder, CO, USA Aug 2018 – Present

- Ph.D. student at the Department of Computer Science

Korea University, Seoul, Korea Mar 2011 – Feb 2018

- Bachelor of Science in Computer science and engineering
- Bachelor of Engineering in Software Technology and Enterprise Program
- Total GPA of 4.15 / 4.5 (96.0 / 100)

RESEARCH EXPERIENCE

Internet Systems Laboratory, CU Boulder, CO, USA Jan 2020 – Present

Research Assistant (Advisor: Professor Sangtae Ha)

Mobile and Networked Systems Laboratory, CU Boulder, CO, USA Jul 2018 – Dec 2019

Research Assistant (Advisor: Professor Tam N. Vu)

Wireless Data Communications Laboratory, Korea University, Seoul, Korea Mar 2016 – Jun 2018

Research Intern (Advisor: Professor Hyogon Kim)

PUBLICATIONS

CONFERENCES

- [1] Nhat Pham, Tuan Dinh, Zohreh Raghebi, [Taeho Kim](#), Nam Bui, Phuc Nguyen, Hoang Truong, Farnoush Banaei-Kashani, Ann Halbower, Thang N. Dinh and Tam Vu, “WAKE: A Behind-the-ear Wearable System for Microsleep Detection,” in *The 18th ACM International Conference on Mobile Systems, Applications, and Services*, Toronto, Canada, Jun 2020.
- [2] Hoang Truong, Nam Bui, Zohreh Raghebi, Marta Ceko, Nhat Pham, Phuc Nguyen, Anh Nguyen, [Taeho Kim](#), Katrina Siegfried, Evan Stene, Taylor Tvrdy, Logan Weinman, Thomas Payne, Devin Burke, Thang Dinh, Sidney D’Mello, Farnoush Banaei-Kashani, Tor Wager, Pavel Goldstein and Tam Vu, “Painometry: Wearable and Objective Quantification System for Acute Postoperative Pain,” in *The 18th ACM International Conference on Mobile Systems, Applications, and Services*, Toronto, Canada, Jun 2020.
- [3] Hyogon Kim and [Taeho Kim](#), “Vehicle-to-vehicle (V2V) Message Content Plausibility Check for Platoons through Low-Power Beaconing,” in *Sensors 2019, 19(24)*, Dec 2019. [pdf]
- [4] Nam Bui, Nhat Pham, Jessica Jacqueline Barnitz, Zhanan Zou, Phuc Nguyen, Hoang Truong, [Taeho Kim](#), Nicholas Farrow, Anh Nguyen, Jianliang Xiao, Robin Deterding, Thang Dinh and Tam Vu, “eBP: A Wearable System For Frequent and Comfortable Blood Pressure Monitoring From User’s Ear,” in *The 25th Annual International Conference on Mobile Computing and Networking*, Los Cabos, Mexico, Oct 2019. [pdf]
- [5] P. Nguyen, [T. Kim](#), J. Miao, D. Hesselius, E. Kenneally, D. Massey, E. Frew, R. Han, and T. Vu, “Towards RF-based Localization of a Drone and Its Controller,” in *The 5th ACM Workshop on Micro Aerial Vehicle Networks, Systems, and Applications*, Seoul, Korea, Jun 2019. [pdf]
- [6] N. Pham, [T. Kim](#), F. M. Thayer, A. Nguyen, and T. Vu, “Demo: Earable - An Ear-Worn Biosignal Sensing Platform for Cognitive State Monitoring and Human-Computer Interaction,” in *The 17th ACM International Conference on Mobile Systems, Applications, and Services (Demo)*, Seoul, Korea, Jun 2019. [pdf] [demo]
- [7] [T. Kim](#), W. Han, H. Kim, and Y. Park, “Vulnerable Road User Protection through Intuitive Visual Cue on Smartphones,” in *Proceedings of the 2nd ACM International Workshop on Connected and Automated Vehicle Mobility, A Workshop of MobiCom 2017*, Snowbird, Utah, USA, Oct 2017. [pdf] [slides] [demo1] [demo2]
- [8] [T. Kim](#) and H. Kim, “Vehicle-to-Vehicle Message Content Plausibility Check through Low-Power Beaconing,” in *Proceedings of IEEE 86th Vehicular Technology Conference: VTC2017-Fall*, Toronto, Canada, Sep 2017. [pdf] [slides] [video]

- [9] T. Kim, W. Han, and Y. Park, “Visual Cue-Based VRU Protection on Smartphones,” in *Proceedings of the 15th ACM International Conference on Mobile Systems, Applications, and Services (poster)*, Niagara Falls, NY, USA, Jun 2017. [pdf] [poster]

TEACHING EXPERIENCE

- Spring 2020: TA for Computer Science 1: Starting Computing-Engineering Application (CSCI 1320)
- Fall 2019: TA for Computer Science 1: Starting Computing-Engineering Applications (CSCI 1320)

PATENTS

- “System and Method for detecting faked location information of a vehicle” [KOR][GER][USA][CHN]
- “Apparatus and Method for Verifying Vehicle in the V2V Environment” [KOR][CHN]

AWARDS & SCHOLARSHIPS

- National Science and Engineering Scholarship, Korea Student Aid Foundation 2015 – 2016
 - For attaining a semester GPA of at least 3.50/4.50. Full-tuition scholarship (3rd and 4th grade)
- Software Technology and Enterprise Program Scholarship, Korea University 2015 – 2016
 - Additional scholarship to support for Software projects and Start-up related educations (3rd and 4th grade)
- Excellent Assistant Award for a Student with Disabilities, Korea University Mar 2016
 - Support Center for Students with Disabilities
 - An assistant who supported the learning of a disabled student for more than a year with high praise
- Academic scholarships, Korea University
 - Best Honors Scholarships (a second semester, 2nd grade) Aug 2014
 - Honors Scholarships (a second semester, 1st grade and a first semester, 2nd grade) Aug 2011, Feb 2014

EXTRA CURRICULAR ACTIVITIES

- Korea University Support Center for Students with Disabilities**, Seoul, Korea Mar 2015 – Jun 2016
Educational Assistant
 - Helped a student with disabilities to keep up with his classes
- Korea University Facilitation Society**, Seoul, Korea Jul 2015 – Mar 2016
Contents Team Leader
 - Made program contents for meeting processes and public relations
 - Conducted conferences and educational services at the request of external agencies
 - Participated in study groups for facilitation techniques and meeting management skills
- Korea University Institute of Computer Security**, Seoul, Korea Mar 2011 – Feb 2012
Member
 - Conducted a project to convert various codes to plain texts in a club competition
 - Participated in study groups for programming languages and reverse engineering
- JoongAng Ilbo Educational Mentoring Program**, Seoul, Korea Sep 2011 – Jan 2012
Educational Volunteer
 - gave a student who was interested in computer science a lot of advice and information for the department
- Seoul Metropolitan Educational Service Program**, Seoul, Korea Jun 2011 – Dec 2011
Educational Volunteer
 - taught math and English after school to students who did not have enough family support

OTHER WORK EXPERIENCE

- Exicon Corp.**, Seongnam, Korea Jan 2016 – Feb 2016
Research and Development Intern
 - Researched technologies of products in semi-conductor testing machine, such as DDI, LCD mobile & panel, PMIC, and AP
 - Analyzed Fast Fourier Transform (FFT) algorithm and applied it for digitizers

MILITARY SERVICE

- Republic of Korea Army**, The 1st Infantry Division, Korea Apr 2012 – Jan 2014
Sergeant
 - Managed the platoon communications equipment and performed administrative works

LANGUAGES

- Korean: Native language
- English: Intermediate

SKILLS

- Experienced in QualNet Network Simulator, SUMO simulator, Kinect, Wireshark, making image data from OpenCV, Linux kernel source analysis

- Proficient in C, C++, Python, Android, MATLAB, L^AT_EX
- Intermediate level in Java, HTML, CSS, PHP, JavaScript
- Others: C#, TensorFlow, Ocaml

REFERENCES

Prof. Sangtae Ha

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Director, Internet Systems Laboratory
Department of Computer Science
University of Colorado Boulder

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Prof. Tam Vu

Assistant Professor
Director, Mobile and Networked Systems (MNS) Laboratory
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University of Colorado Boulder

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Prof. Hyogon Kim

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