JINHONG "JIN " CHOI

Corvallis, OR | +1-617-803-3057 | jinhong.choi@gmail.com | jinhongchoi | imreburn

SUMMARY

Experienced in researching cyber-physical systems, particularly drones, with a strong background in software development in C on drone platforms. Holding a solid foundation in computer science and mechanical engineering, I focus on developing software and applying algorithms for embedded systems, IoT devices, and autonomous vehicles.

EDUCATION

Oregon State University — Corvallis, OR
Master of Science, Electrical Engineering and Computer Science (GPA: 3.83/4.00) — April 2019 – August 2024
A Decentralized Algorithm for Detecting a Global Predicate in Real-time for a Swarm of Drones

Massachusetts Institute of Technology — Cambridge, MA
Completed 72 credits towards a MS in Mechanical Engineering (GPA: 4.8/5.0) — September 2010 – January 2014

Korea Advanced Institute of Science and Technology — Daejeon, South Korea
Bachelors of Science, Mechanical Engineering, *summa cum laude* (GPA: 3.91/4.00) — January 2010

WORK EXPERIENCE

Oregon State University — Corvallis, OR
Graduate Research Assistant — June 2020 – Present

- Three projects regarding security and safety for Unmanned Aerial System (UAS), funded by Federal Aviation Administration (FAA): A38–UAS Cyber Security and Safety Literature Review, A58–Illustrate the Need for Cybersecurity Oversight and Risk Management, A51–Best Engineering Practices for Automated Systems
- A project funded by OMIC: Enhancing human-robot teaming via improvements to nonverbal robot expression

Graduate Teaching Assistant: Operating Systems II, Algorithms and Data Structures

Hyundai KEFICO — Gunpo, South Korea
Researcher, Prototype Development Team — February 2016 – February 2019

- Prototyped gasoline fuel injectors under development, specialized to control femto-second laser systems for precise drilling of fuel spray holes

LX Hausys *(previously LG Hausys)* — Seoul, South Korea
Consultant — February 2010 – June 2010

- Consulted on optically transparent adhesive used in touchscreens for mobile devices

Hantouch — Seoul, South Korea
Researcher (alternative to mandatory military service) — February 2007 – May 2009

- Developed resistive touchscreens integrated with mobile devices, securing three patents in South Korea (Application Numbers: 10-2008-0070246, 10-2008-0056270, 10-2007-0113098)

SKILLS

Programming Languages	C/C++, Python, Julia, Haskell
Languages	English (Professional), Korean (Native)
Others	Git, ROS, FreeRTOS, Unix/Linux, AutoCAD, MATLAB

PUBLICATIONS

[1] Unmesh Uttam Patil, **Jinhong Choi**, and Houssam Abbas. "OUT-HERD: Opportunistic UAV Takeover for Herding Malfunctioning Drones". In: *2024 IEEE 27th International Conference on Intelligent Transportation Systems (ITSC)*. 2024.

[2] **Jinhong Choi** and Yeongjin Jang. "A Survey on Sensor False Data Injection Attacks and Countermeasures in Cyber-Physical and Embedded Systems". In: *Information Security Applications: 23rd International Conference, WISA 2022, Revised Selected Papers*. Springer. 2022.