

# Jaeseung Choi

ROSAEC (Research on Software Analysis for Error-free Computing) Center  
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## RESEARCH INTERESTS

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Static analysis, abstract interpretation, software security bug, binary analysis.

## RESEARCH POSITION

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**ROSAEC center, Seoul National University** *(Scheduled to be) Mar 2015 -*  
Master's course student in Computer Science & Engineering  
Advisor : Prof. Kwangkeun Yi

## EDUCATION

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**Seoul National University** *Mar 2011 - Feb 2015*  
Bachelor of Science in Computer Science & Engineering  
Major GPA : 4.02 / 4.30  
Overall GPA : 3.91 / 4.30  
Thesis : "A Static Analyzer for Detecting Buffer Overrun Vulnerabilities in x86 Binary Executables"  
(Abstract) This paper describes a static analyzer that detects buffer overrun vulnerabilities in binary executables. The analyzer was designed based on abstract interpretation framework. It statically analyzes the memory access pattern of an input binary, and use that information to find buffer overrun errors. The analyzer's prototype implementation is capable of detecting buffer overrun from simple example binaries.  
Advisor : Prof. Kwangkeun Yi

## RESEARCH & WORKING EXPERIENCE

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**ROSAEC Center** *Sep 2013 - Dec 2014*  
Research Assistant  
Research Topic : Detecting buffer overrun in binary executables, using abstract interpretation  
Advisor : Prof. Kwangkeun Yi

**Real-time Ubiquitous System Laboratory** *Mar 2013 - July 2013*  
Research Assistant  
Research Topic : Implementation of Precise Time Protocol (IEEE 1588) in real-time OS  
Advisor : Prof. Chang-Gun Lee

## TALKS

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- A static analyzer for detecting buffer overrun in binary executables** *Jan 27, 2015*  
Poster presentation at 12th ROSAEC Workshop  
Gyeonggi-do, KOREA
- Detecting buffer overrun from x86 binary** *July 29, 2014*  
Lightening talk at 11th ROSAEC Workshop  
Gyeonggi-do, KOREA

## CONFERENCE ATTENDANCE

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- 21st International Static Analysis Symposium (SAS 2014)** *Sep 11-13, 2014*  
Including affiliated workshops, TAPAS 2014 and NSAD 2014  
Munich, Germany
- 15th annual CanSecWest Conference (CanSecWest 2014)** *Mar 12-14, 2014*  
Vancouver, Canada

## EXTRACURRICULAR ACTIVITY

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- Information Security Education Course, “Best of the Best”** *Aug 2013 - Feb 2014*  
KITRI (Korea Information Technology Research Institute)  
Mentor : Seungjin Lee, Junbo Sim  
Awarded minister prize, as one of the best 10 students in program
- Computer Security Research Club, “Guardian”** *Mar 2011 - Feb 2014*  
An official club of Computer Science & Engineering Department of Seoul National Univ.  
Served as the club president in Jan. 2012 - Dec. 2012  
<http://csguard.snu.ac.kr:9888>

## SCHOLARSHIP

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- National Scholarship of Excellence (for Science & Engineering)** *Mar 2011 - Feb 2015*  
Korea Student Aid Foundation (KOSAF)  
Full support for tuition fee

## TECHNICAL SKILLS

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- Have experience with OCaml, Python, C, C++, and Java.  
Developed a static analyzer in abstract interpretation framework.  
Skillfull at finding software vulnerability, with fuzzing or code assessment.

## REFERENCES

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**Kwangkeun Yi**

Professor

Department of Computer Science and Engineering

Seoul National University

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