

Michał Koperski

PHD STUDENT AT INRIA

2004, route des Lucioles - BP 93, 06902, Sophia Antipolis Cedex, France

☎ (+33) 492 38 76 58 | ✉ michal.koperski@inria.fr | 🏠 mkoperski.com | 📱 [michal](#) | 🌐 [mkoperski](#)

Education

INRIA, University of Nice Sophia Antipolis

PH.D. IN COMPUTER SCIENCE (COMPUTER VISION)

Sophia Antipolis, France

Jan. 2014 - exp. Nov. 2017

- Advisor: Francois Bremond, INRIA
- Reviewer: Matthieu Cord, University Pierre Marie Curie
- Reviewer: Leonid Sigal, University of British Columbia
- Examiner: Jean-Marc Odobez, IDIAP
- President: Federic Precioso, University of Nice Sophia Antipolis

Poznan University of Technology

M.Sc. IN COMPUTER SCIENCE AND ENGINEERING

Poznan, Poland

Feb. 2007 - Aug. 2009

Poznan University of Technology

B.S. IN COMPUTER SCIENCE AND ENGINEERING

Poznan, Poland

Oct. 2004 - Feb. 2007

Skills

- Programming** Python, Node.JS, C/C++, Scala, JAVA, OCaml, LaTeX
- Web** Django, Express, Redux, React, HTML5, LESS, SASS
- Languages** Korean, English, Japanese, Chinese

Experience

PLAT Corp.

CO-FOUNDER & SOFTWARE ENGINEER

Seoul, S.Korea

Jan. 2016 - PRESENT

- Implemented RESTful API server for car rental booking application(CARPLAT in Google Play).
- Built and deployed overall service infrastructure utilizing Docker container, CircleCI, and several AWS stack(Including EC2, ECS, Route 53, S3, CloudFront, RDS, ElastiCache, IAM), focusing on high-availability, fault tolerance, and auto-scaling.
- Developed an easy-to-use Payment module which connects to major PG(Payment Gateway) companies in Korea.

Undergraduate Research, Machine Learning Lab(Prof. Seungjin Choi)

RESEARCHER

Pohang, S.Korea

Mar. 2016 - Exp. Jun. 2017

- Researched classification algorithms(SVM, CNN) to improve accuracy of human exercise recognition with wearable device.
- Developed two TIZEN applications to collect sample data set and to recognize user exercise on SAMSUNG Gear S.

R.O.K Cyber Command, MND

SOFTWARE ENGINEER & SECURITY RESEARCHER (COMPULSORY MILITARY SERVICE)

Seoul, S.Korea

Aug. 2014 - Apr. 2016

- Lead engineer on agent-less backtracking system that can discover client device's fingerprint(including public and private IP) independently of the Proxy, VPN and NAT.
- Implemented a distributed web stress test tool with high anonymity.
- Implemented a military cooperation system which is web based real time messenger in Scala on Lift.

NEXON

GAME DEVELOPER INTERN AT GLOBAL INTERNSHIP PROGRAM

Seoul, S.Korea & LA, U.S.A

Jan. 2013 - Feb. 2013

- Developed in Cocos2d-x an action puzzle game(Dragon Buster) targeting U.S. market.
- Implemented API server which is communicating with game client and In-App Store, along with two other team members who wrote the game logic and designed game graphics.
- Won the 2nd prize in final evaluation.

Undergraduate Research, Computer Vision Lab(Prof. Bohyung Han)

RESEARCHER FOR <DETECTING VIDEO'S TORRENTS USING IMAGE SIMILARITY ALGORITHMS>

Pohang, S.Korea

Sep. 2012 - Feb. 2013

- Researched means of retrieving a corresponding video based on image contents using image similarity algorithm.
- Implemented prototype that users can obtain torrent magnet links of corresponding video relevant to an image on web site.

Software Maestro (funded by Korea Ministry of Knowledge and Economy)

Seoul, S.Korea

SOFTWARE ENGINEER TRAINEE

Jul. 2012 - Jun. 2013

- Performed research memory management strategies of OS and implemented in Python an interactive simulator for Linux kernel memory management.

ShitOne Corp. (Start-up company)

Seoul, S.Korea

SOFTWARE ENGINEER

Dec. 2011 - Feb. 2012

- Developed a proxy drive smartphone application which connects proxy driver and customer. Implemented overall Android application logic and wrote API server for community service, along with lead engineer who designed bidding protocol on raw socket and implemented API server for bidding.

SAMSUNG Electronics

S.Korea

FREELANCE PENETRATION TESTER

Sep. 2013, Mar. 2011 - Oct. 2011

- Conducted penetration testing on SAMSUNG KNOX, which is solution for enterprise mobile security.
- Conducted penetration testing on SAMSUNG Smart TV.

Program Committees

- 2016 **Problem Writer**, 2016 CODEGATE Hacking Competition World Final
- 2013 **Organizer & Co-director**, 1st POSTECH Hackathon
- 2012 **Staff**, 7th Hacking Camp
- 2012 **Problem Writer**, 1st Hoseo University Teenager Hacking Competition
- 2012 **Staff & Problem Writer**, JFF(Just for Fun) Hacking Competition

S.Korea

S.Korea

S.Korea

S.Korea

S.Korea

Publications

BOOK CHAPTERS

Online Recognition of Daily Activities by Color-Depth Sensing and Knowledge Models

Carlos Crispim-Junior, Alvaro Gomez Uribe, Carola Strumia, Michal Koperski, Alexandra König, Farhood Negin, Serhan Cosar, Anh Tuan Nghiem, Duc Phu Chau, Guillaume Charpiat, Francois Bremond

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JOURNAL ARTICLES

Online Recognition of Daily Activities by Color-Depth Sensing and Knowledge Models

Carlos Crispim-Junior, Alvaro Gomez Uribe, Carola Strumia, Michal Koperski, Alexandra König, Farhood Negin, Serhan Cosar, Anh Tuan Nghiem, Duc Phu Chau, Guillaume Charpiat, Francois Bremond

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CONFERENCE PROCEEDINGS

Groups Re-identification with Temporal Context

Michal Koperski, Slawomir Bak, Peter Carr

Proceedings of the 2017 ACM on International Conference on Multimedia Retrieval, 2017, Bucharest, Romania

Action Recognition based on a mixture of RGB and Depth based skeleton

Das Srijan, Michal Koperski, Francois Bremond, Gianpiero Francesca

2017 14th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), 2017

Semi-supervised understanding of complex activities from temporal concepts

Carlos Fernando Crispim-Junior, Michal Koperski, Serhan Cosar, Francois Bremond

13th International Conference on Advanced Video and Signal-Based Surveillance, 2016, Colorado Springs, United States

Modeling Spatial Layout of Features for Real World Scenario RGB-D Action Recognition

Michal Koperski, Francois Bremond

AVSS 2016, 2016, Colorado Springs, United States

A hybrid framework for online recognition of activities of daily living in real-world settings

Farhood F Negin, Serhan Cosar, Michal F Koperski, Carlos F Crispim-Junior, Konstantinos Avgerinakis, Francois F Bremond

13th IEEE International Conference on Advanced Video and Signal Based Surveillance - AVSS 2016, 2016, Colorado springs, United States

Generating unsupervised models for online long-term daily living activity recognition

F. Negin, S. Cogar, F. Bremond, M. Koperski

2015 3rd IAPR Asian Conference on Pattern Recognition (ACPR), 2015

Minimizing hallucination in Histogram of Oriented Gradients

Javier Ortiz, Slawomir Bak, Michal Koperski, François Brémont

The 12th IEEE International Conference on Advanced Video and Signal-based, 2015, Karlsruhe, Germany

Representing Visual Appearance by Video Brownian Covariance Descriptor for Human Action Recognition

Piotr Bilinski, Michal Koperski, Slawomir Bak, Francois Bremond

AVSS, 2014, Seoul, South Korea

3D trajectories for action recognition

M. Koperski, P. Bilinski, F. Bremond

2014 IEEE International Conference on Image Processing (ICIP), 2014

PHD THESIS

Online Recognition of Daily Activities by Color-Depth Sensing and Knowledge Models

Carlos Crispim-Junior, Alvaro Gomez Uria, Carola Strumia, Michal Koperski, Alexandra König, Farhood Negin, Serhan Cosar, Anh Tuan Nghiem, Duc Phu Chau, Guillaume Charpiat, Francois Bremond

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