

# Sungyong (David) Baik

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## Education

### Seoul National University

M.S. AND PH.D. CANDIDATE IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

- Advisor: [Prof. Kyoung Mu Lee](#)

[Seoul, Korea](#)

Sep. 2015 - Present

### University of Toronto

BASC IN ENGINEERING SCIENCE WITH A MAJOR IN ELECTRICAL AND COMPUTER ENGINEERING, CGPA: 3.75/4.0

[Toronto, Canada](#)

Sep. 2010 - Jun. 2015

## Research Interests

**Computer Vision and Machine Learning**   meta-learning, few-shot learning, domain adaptation

## Publications

### Meta-Learning with Adaptive Hyperparameters

**SUNGYONG BAIK**, MYUNG SUB CHOI, JANGHOON CHOI, HEEWON KIM, KYOUNG MU LEE

[NeurIPS2020](#)

### Domain Adaptation of Learned Features for Visual Localization

**SUNGYONG BAIK**, HYU JIN KIM, TIANWEI SHEN, EDDY ILG, KYOUNG MU LEE, CHRIS SWEENEY

- Work done while at Facebook Reality Labs

[BMVC2020](#)

### Learning to Forget for Meta-Learning

**SUNGYONG BAIK**, SEOKIL HONG, KYOUNG MU LEE

[CVPR2020](#)

### Scene-Adaptive Video Frame Interpolation via Meta-Learning

MYUNG SUB CHOI, JANGHOON CHOI, **SUNGYONG BAIK**, TAE HYUN KIM, KYOUNG MU LEE

[CVPR2020](#)

### Learning to Remember Past to Predict Future for Visual Tracking

**SUNGYONG BAIK**, JUNSEOK KWON, KYOUNG MU LEE

- Oral Presentation

[ICIP2019](#)

## Relevant Experience

### Facebook Reality Labs

RESEARCH INTERN

- Few-Shot Domain Adaptation for Visual Localization
- BMVC2020 publication

[Redmond, WA](#)

Nov. 2019 - Apr. 2020

## Projects

### Few-Shot Product Defect Detection

COLLABORATION WITH HYUNDAI

[Seoul, Korea](#)

Apr. 2019 - Present

### Large-scale Object Recognition with Few Examples

COLLABORATION WITH SAMSUNG

[Seoul, Korea](#)

May. 2017 - May 2018

### Traffic Sign Recognition System

COLLABORATION WITH LG

[Seoul, Korea](#)

Apr. 2017 - Dec. 2017

## Vehicle Dashboard and License Plate Number Recognition

COLLABORATION WITH SAMSUNG

Seoul, Korea

Apr. 2016 - Jun. 2017

## Experience

### University of Toronto

RESEARCH ASSISTANT

- Analysis on the security of quantum cryptography

Toronto, Canada

May 2014 - Aug. 2014

### Marvell Semiconductor

ASIC DESIGN VERIFICATION ENGINEER

- Test bench development for transaction protocols

Santa Clara, CA

Sep. 2013 - Apr. 2014

### University of Toronto

RESEARCH ASSISTANT

- Analysis on the synchronized smart grid system under cyber-attacks

Toronto, Canada

May 2013 - Aug. 2013

### University of Toronto

RESEARCH ASSISTANT

- Control system development for dc-dc converters
- Publication: *Noninvasive self-tuning output capacitor time constant estimator for low power digitally controlled dc-dc converters*. Aleksandar Radić, **David Baik**, Adrian Straka, Aleksandar Prodić, Robert de Nie. APEC2013. **Best Presentation Award**

Toronto, Canada

May 2012 - Aug. 2012

## Teaching Experience

### Seoul National University

TEACHING ASSISTANT

- Undergrad Final Year Project

Seoul, Korea

Mar. 2019 - Jun. 2019

### Seoul National University

TEACHING ASSISTANT

- New Trends in Computer Vision

Seoul, Korea

Mar. 2019 - Jun. 2019

### Seoul National University

TEACHING ASSISTANT

- Introduction to Computer Vision

Seoul, Korea

Mar. 2018 - Jun. 2018

### University of Toronto

TEACHING ASSISTANT

- First-year Calculus course

Toronto, Canada

Sep. 2014 - Dec. 2014

### University of Toronto

TEACHING ASSISTANT

- First-year Calculus course

Toronto, Canada

Sep. 2012 - Dec. 2012

## Awards

SAMSUNG RESEARCH SCHOLARSHIP

2020 - Present

DEAN'S HONOURS LIST

2011, 2012, 2013

UTEA (UNIVERSITY OF TORONTO EXCELLENCE AWARDS) AWARD FOR SUMMER RESEARCH

2013

JOHN M. EMPEY SCHOLARSHIP

2011

FACULTY OF APPLIED SCIENCE AND ENGINEERING ADMISSION SCHOLARSHIP

2010

MATTY BARANOVSKI SCHOLARSHIP AWARD

2010

## Skills

Python, Java, C/C++, MATLAB, Perl, PyTorch,  $\text{\LaTeX}$