

# Onur Beker

Email: onurbeker@gmail.com  
Website: www.onurbeker.com  
Phone: +905312539641

## EDUCATION

---

### **Bogazici University**

*Electrical and Electronics Engineering, Junior*  
*GPA: 3.93/4.00*

2014 - Present

### **Tsukuba University**

*Exchange Student*

2017 - 2018

### **Izmir Science High School**

*High School*

2010 - 2014

## RESEARCH EXPERIENCE

---

### **Max Planck Institute for Intelligent Systems**

*Research Intern at Physical Intelligence Department*

June 2018 – September 2018

*Stuttgart, Germany*

- Designed a new method for the self-assembly and actuation of microrobots, using dielectrophoresis. Details of our work can be found in the corresponding article in *Nature Materials*.

### **Harvard-MIT Health Sciences & Technology/MGH, Athinoula A. Martinos Center for Biomedical Imaging**

*Research Intern at MR Physics and Instrumentation Group*

June 2019 – September 2019

*Boston, U.S*

- Built an MRI artifact reduction method that uses only scan-specific data. My work there is summarized in the corresponding ISMRM abstracts.

## PUBLICATIONS

---

- Yunus Alapan, Berk Yigit, **Onur Beker**, Ahmet F. Demirörs, Metin Sitti. “Shape-encoded programmable dynamic assembly of mobile micromachines”. *Nature Materials*, 2019. [link]
- **Onur Beker**, Congyu Liao, Jaejin Cho, Zijing Zhang, Kawin Setsompop, and Berkin Bilgic. “Scan-specific, Parameter-free Artifact Reduction in K-space (SPARK)”. (*submitted to*) *ISMRM*, 2020. [link]
- Jaejin Cho, Congyu Liao, Zijing Zhang, Wei-Ching Lo, Jinmin Xu, **Onur Beker**, Kawin Setsompop, and Berkin Bilgic. “Highly Accelerated EPI with Wave Encoding and Multi-shot Simultaneous MultiSlice Imaging”. (*submitted to*) *ISMRM*, 2020. [link]

## SCHOLARSHIPS AND AWARDS

---

### **JASSO Scholarship for Short Term Study in Japan (2017 – 2018)**

Awarded by the Japanese Ministry of Education, Culture, Sports, Science and Technology.

### **BUMED Extensive Success Scholarship (2014 – 2019)**

Awarded by Bogazici University Alumni Association

### **Merit Based Prime Ministry Scholarship for Higher Education (2014 – 2019)**

Awarded by Turkish Government for 65<sup>th</sup> degree in Undergraduate Placement Examination (LYS)

## SKILLS

---

- **Programming:** Python, MATLAB, C/C++, Java, VHDL
- **Python:** NumPy, SciPy, Pytorch, Tensorflow, Keras
- **Tools:** Solidworks, COMSOL, PSpice, XILINX
- **Lab Work:** Microscopy, Nanoscribe, Image-J
- **Other:** Linux, Shell Scripts, Microsoft Office and other common applications for Windows

## LANGUAGES

---

- **English:** Professional, (TOEFL IBT score: 112/120, GRE Verbal Score: 163/170)
- **Turkish:** Native Speaker
- **Japanese:** Conversational