

EDUCATION

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- **Stanford University** Stanford, CA  
*PhD Student in Electrical Engineering; GPA: 4.13/4.00* *Sept 2017 – present*  
*Advisor: Prof. Dorsa Sadigh*
- **Bilkent University** Ankara, Turkey  
*Bachelor of Science in Electrical and Electronics Engineering; GPA: 4.00/4.00* *Aug 2012 – June 2017*  
*Rank: 1/170 based on GPA*
- **National University of Singapore** Singapore  
*Exchange Student in Electrical and Computer Engineering* *Aug 2015 – Dec 2015*

HONORS & AWARDS

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- **Stanford University Electrical Engineering PhD Qualifying Exam (2018)**: Passed (ranks were not publicized by the department)
- **Stanford University James D. Plummer Graduate Fellowship (2017-2018)**: Full tuition waiver & stipend during the first year of PhD program
- **Bilkent University Electrical and Electronics Engineering Department, Graduation Awards (2017)**: Academic Excellence, Research Excellence, Voluntary Professional Activities, Social Awareness and Activities
- **Scholarship of the Turkish Prime Ministry**: Awarded monthly stipend during the BSc program
- **Bilkent University Comprehensive Scholarship**: Full tuition waiver & stipend during the BSc program
- **IEEEExtreme Programming Competitions**: 2<sup>nd</sup> in Turkey, 78<sup>th</sup> among all participants, 2015. 1<sup>st</sup> in Turkey, 73<sup>rd</sup> among all participants, 2014. 1<sup>st</sup> in Turkey, 100<sup>th</sup> among all participants, 2013. (All as a group of three students)
- **Turkish Intelligence Foundation (TZV) Marathon**: Ranked twice in top 25 and once 6<sup>th</sup>, 2012-2014
- **İşbank Golden Youth Award**: Granted for outstanding performance in the nationwide university entrance exam
- **Nationwide University Entrance Exam (LYS)**: Ranked 13<sup>th</sup> among 1.8 million students in Turkey, 2012

WORK EXPERIENCE

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- **National Magnetic Resonance Research Center (UMRAM)** Ankara, Turkey  
*Undergraduate Researcher & Research Intern* *Apr 2016 - Sept 2017*
  - **csMRI**: Developing compressed sensing methods for accelerated MRI under the supervision of Prof. Tolga Çukur
  - **SSFP Imaging**: Developing coil compression methods and artifact suppression techniques for balanced SSFP under the supervision of Prof. Tolga Çukur
- **ASELSAN** Ankara, Turkey  
*Intern (2015), Research Engineer (2017)* *June 2015 - July 2015, Apr 2017 - Aug 2017*
  - **Military Communications (2015)**: Developing a C++ program to decode and encode data in MIL-STD-3014 protocol with an easy-to-use interface
  - **Algorithms Design (2015)**: Designing algorithms to solve composite launch acceptability region problem
  - **SSFP Imaging (2017)**: R&D projects related to field inhomogeneity, banding profile estimation, coil compression and banding suppression in bSSFP MRI under the supervision of Dr. Aykut Koç
- **École polytechnique fédérale de Lausanne (EPFL)** Lausanne, Switzerland  
*Research Intern, Summer@EPFL Program* *June 2016 - Sept 2016*
  - **Approximate Message Passing**: Research about approximate message passing algorithms as an intern in the Information Processing Group under the supervision of Prof. Rüdiger Urbanke
- **Anadolu Agency** Ankara, Turkey  
*Intern* *June 2014 - July 2014*
  - **Image Processing**: Developing a Java, C++ and MySQL based program that uses image registration, matching and comparison techniques to detect copyright infringements

## TEACHING EXPERIENCE

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- **Bilkent University**

- *Teaching Assistant*

Ankara, Turkey

*Spring 2014, Fall 2016*

- **CS114 Introduction to Programming for Engineers (2014)**: Teaching in the weekly tutorials & recitations
- **EEE211 Analog Electronics (2016)**: Teaching, interviewing and grading students in the laboratory sessions

## JOURNAL PUBLICATIONS

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- **E Biyik**, E Ilicak, T Çukur. “Reconstruction by Calibration over Tensors for Multi-Coil Multi-Acquisition Balanced SSFP Imaging”, *Magnetic Resonance in Medicine*, 2017; doi: 10.1002/mrm.26902
- E Ilicak, LK Senel, **E Biyik**, T Çukur. “Profile-encoding reconstruction for multiple-acquisition balanced steady-state free precession imaging”, *Magnetic Resonance in Medicine*, 2016; doi: 10.1002/mrm.26507

## REFEREED CONFERENCE PUBLICATIONS

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- **E Biyik\***, J Margoliash\*, SR Alimo, D Sadigh (\*equal contribution). “Efficient and Safe Exploration in Deterministic Markov Decision Processes with Unknown Transition Models”, *American Control Conference (ACC)*, Philadelphia, Pennsylvania, USA, Jul. 2019. (*Submitted*)
- **E Biyik\***, DA Lazar\*, R Pedarsani, D Sadigh (\*equal contribution). “Altruistic Autonomy: Beating Congestion in Shared Roads”, *Workshop on Algorithmic Foundations of Robotics (WAFR)*, Mérida, México, Dec. 2018.
- **E Biyik**, D Sadigh. “Batch Active Preference-Based Learning of Reward Functions”, *2nd Conference on Robot Learning (CoRL)*, Zürich, Switzerland, Oct. 2018.
- HC Baykara\*, **E Biyik\***, G Gül\*, D Onural\*, AS Öztürk\*, İ Yıldız\* (\*equal contribution). “Real-Time Detection, Tracking and Classification of Multiple Moving Objects in UAV Videos”, *29th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)*, Boston, Massachusetts, USA, Nov. 2017.
- **E Biyik**, J Barbier, M Dia. “Generalized Approximate Message-Passing Decoder for Universal Sparse Superposition Codes”, *IEEE International Symposium on Information Theory (ISIT)*, Aachen, Germany, Jun. 2017.

## TALKS

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- Batch Active Preference-Based Learning of Reward Functions (CoRL 2018)

## PROFESSIONAL ACTIVITIES

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- **Conferences Organized**

- **Local Arrangements Chair**, Bay Area Robotics Symposium (BARS), 2018

- **Reviewer**

- ACM Transactions on Human-Robot Interaction (THRI)
- ACM International Conference on Hybrid Systems: Computation and Control (HSCC), 2019
- American Control Conference (ACC), 2019

- **Memberships**

- Institute of Electrical and Electronics Engineers (IEEE) Member

## EXTRACURRICULAR ACTIVITIES

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- **Stanford University AI Mentorship Program, 2018-present** Stanford, CA
  - **Co-organizer:** Organizing the AI mentorship program in Stanford University Computer Science Department, and helping out with the related events
  - **Mentor:** Mentoring first and second-year undergraduate students about their future career, getting involved in AI research, and applying for industry or graduate school
- **Stanford Turkish Student Association, 2018-present** Stanford, CA
  - **IT Administrator:** Maintaining the website and social media profiles of Stanford Turkish Student Association
- **IEEE Bilkent Student Branch, 2012-2017** Ankara, Turkey
  - **Road to University Volunteer (2013-2017):** Introducing engineering and campus life to high school students from all around Turkey
  - **Vice Chair (2014-2015):** Managing and organizing the technical trainings and social events
  - **Robotics and Automation Society Member (2012-2015):** Assistantship in the electronics and robotics focused tutorials
  - **Web Team Member (2012-2013) and Webmaster (2013-2014):** Designing and managing the web site of IEEE Bilkent SB, its communities and events; teaching in web design tutorials and in MATLAB tutorials; organizing a Java programming competition and weekly brain teasers
- **GazeteBilkent, 2014-2017** Ankara, Turkey
  - **Online Operations Manager:** Managing the website of GazeteBilkent, an online newspaper
- **Bilkent University, 2014-2017** Ankara, Turkey
  - **Webmaster of Electrical and Electronics Engineering (2013-2017), Mechanical Engineering (2015-2017), Economics (2016-2017) Departments:** Designing, developing and managing the web sites of the departments and developing necessary web tools
  - **1<sup>st</sup> and 2<sup>nd</sup> Industrial Design Projects Fairs Student Coordinator and Webmaster (2015, 2016):** Organizing the fair in which the senior students of Bilkent EEE present their industry projects
  - **Graduate Research Conference '15 Student Coordinator (2015):** Organizing the conference series in which graduate students of Bilkent EEE present their research and projects
  - **Graduate Research Conference '14 Webmaster and Organization Team Member (2014):** Organizing the conference series in which graduate students of Bilkent EEE present their research and projects
- **Bilkent Chess Society, 2013-2014** Ankara, Turkey
  - **Vice Chair:** Organizing tournaments on campus, participating in local events as a team
- **Bilkent Academic Career Club, 2013** Ankara, Turkey
  - **Physics Olympiads Volunteer:** Organizing a physics competition among high school students
- **Ankara Atatürk Anadolu High School, 2009-2012** Ankara, Turkey
  - **Mathematics, Chess, Table Tennis Team Member:** Organizing tournaments & competitions in the school, participating in local events as a team