

## **Samet YAVUZ**

Mechanical Engineering Department

Çankaya University, Ankara

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## **EDUCATION**

### **Ph. D.**

Hacettepe University, Ankara, Turkey  
Mechanical Engineering Department

**February 2018 – Ongoing**

GPA: 3.77/4.00

### **M. Sc.**

Çankaya University, Ankara, Turkey  
Mechanical Engineering Department

**Sept. 2015 – Nov. 2017**

GPA: 4.00/4.00

### **B. Sc.**

Osmangazi University, Eskişehir, Turkey  
Mechanical Engineering Department

**Sept. 2010 – June 2015**

GPA: 3.74/4.00

### **High School**

Eskişehir Atatürk Lisesi, Eskişehir, Turkey

**Sept. 2006 – June 2010**

GPA: 85.39/100

## **EMPLOYMENT**

**Çankaya University**  
Mechanical Engineering  
Department

**Research Assistant**

**Sept. 2015 – Ongoing**  
Ankara/Turkey

## **AWARDS AND SCHOLARSHIPS**

Sept. 2010 – June 2015

June 2015

Sept. 2010 – June 2015

High Honor student during B. Sc. studies

2<sup>nd</sup> ranking student in B. Sc. graduation

Eti Yüksek Öğrenim Bursu

## **STUDIES AND PUBLICATIONS**

### **Articles**

- 1- Selvi, Ö. and **Yavuz, S.** (2018) ‘Dimensional optimisation of a 3-DoF spherical parallel manipulator for rehabilitation by using firefly algorithm’, Int. J. Mechanisms and Robotic Systems, Vol. 4, No. 2, pp. 107–119

- 2- **Yavuz, S.** (2019). One Dof Thumb Mechanism and Its Dimensional Optimization. *International Journal of Multidisciplinary Studies and Innovative Technologies*, 3 (2), 131-134
- 3- Selvi Ö., Ceccarelli M., **Yavuz S.** (2019) Design and Optimization of a Walking Over-Constrained Mechanism. In: Uhl T. (eds) *Advances in Mechanism and Machine Science*. IFToMM WC 2019. Mechanisms and Machine Science, vol 73. Springer, Cham. [https://doi.org/10.1007/978-3-030-20131-9\\_68](https://doi.org/10.1007/978-3-030-20131-9_68)

### **National Conferences**

- 1- **Yavuz S.** ve Selvi Ö., Üç Serbestlik Dereceli Paralel Rehabilitasyon Eyleyicinin Ateş Böceği Algoritması Kullanılarak Boyutsal Olarak Eniyilemesi, Türkiye Robotbilim Konferansı TORK2016, 2-3 Kasım 2016
- 2- **Yavuz S.** ve Selvi Ö., Aşırı-Tanımlı Paralel Bir Rehabilitasyon Eyleyicisinin Analizi, UMTS 2017 18. Ulusal Makina Teorisi Sempozyumu, 5-7 Temmuz 2017

### **International Conferences**

- 1- **Yavuz S.** Dört Kol Mekanizma Tabanlı Bir Tutucunun Kinematik Analizi ve Çalışma Uzayı, 2019, *International Symposium on Academic Studies in Science, Engineering and Architecture Studies*, 15-17 Kasım 2019
- 2- E. Yılmaz and **S. Yavuz**, "A Simple Way for Estimating Mechanical Properties from Stress-Strain Diagram using MATLAB and Mathematica," 2019 3rd *International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)*, Ankara, Turkey, 2019, pp. 1-4.
- 3- **Yavuz, S.**, and Himmetoglu, S. Neck protection in autonomous car crashes. In *Proceedings of the 24th International Scientific Conference Transport Means 2020*, Online Conference, Kaunas, Lithuania, 30 September-2 October 2020, pp. 147-152, ISSN 2351-7034.

### **Book Chapters**

- 1- **Yavuz S.** and Selvi Ö., Design and Dimensional Optimization of a Novel Walking Mechanism with Firefly Algorithm, *International Workshop on Computational Kinematics*. Springer, Cham, 2017. p. 67-75

## **Working Papers**

- 1- A Transformation Matrices Module in Position Analysis of Serial Manipulators for Denavit-Hartenberg Method
- 2- Design and Implementation of an Electro-Goniometer to Measure Human Wrist Joint Boundaries

## **ASSISTANSHIPS**

### **2015 – 2016 Fall**

ME 113	Computer Aided Engineering Drawing I
ME 211	Thermodynamics I
ME 307	Machine Elements I
ME 313	Heat Transfer

### **2015 – 2016 Spring**

ME 102	Mechanical Engineering Orientation
ME 114	Computer Aided Engineering Drawing II
ME 202	Strength of Materials
ME 302	Theory of Machines II
ME 308	Machine Elements II
ME 417	Design of Mechanism and Machines

### **2016 – 2017 Fall**

ME 113	Computer Aided Engineering Drawing I
ME 307	Machine Elements I
ME 313	Heat Transfer
ME 431	System Dynamics
ME 211	Thermodynamics I

### **2016 – 2017 Spring**

ME 114	Computer Aided Engineering Drawing II
MECE 114	Computer Aided Engineering Drawing II
ME 198	Computational Tools for Mechanical Engineers
ME 212	Thermodynamics II
ME 302	Theory of Machines II
ME 308	Machine Elements II
ME 417	Design of Mechanism and Machines

### **2017 – 2018 Fall**

ME 113	Computer Aided Engineering Drawing I
ME 210	Manufacturing Processes
ME 313	Heat Transfer
ME 431	System Dynamics

ME 211	Thermodynamics I
ME 301	Theory of Machines I
<b>2017 – 2018 Spring</b>	
ME 114	Computer Aided Engineering Drawing II
ME 206	Dynamics
ME 210	Manufacturing Processes
ME 212	Thermodynamics II
ME 312	Experimentation and Measurement
ME 417	Design of Mechanism and Machines
<b>2018 – 2019 Fall</b>	
ME 113	Computer Aided Engineering Drawing I
ME 203	Statics
ME 301	Theory of Machines I
ME 307	Machine Elements I
ME 331	Numerical Methods for Mechanical Engineers
ME 431	System Dynamics
Faculty Exam Coordination	
<b>2018 – 2019 Spring</b>	
ME 203	Statics
ME 202	Strength of Materials
ME 302	Theory of Machines II
Faculty Exam Coordination	
<b>2019 – 2020 Fall</b>	
ME 203	Statics
Department Exam Coordination	
Department Summer Training Coordination	
<b>2019 – 2020 Spring</b>	
ME 203	Statics
ME 202	Strength of Materials
ME 302	Theory of Machines II
Department Exam Coordination	
Department Summer Training Coordination	

## **INTERNSHIPS**

<b>Şeker Fabrikaları, Eskişehir Makine Fabrikası</b>	<b>June 2013 – July 2013</b> (15 working days) Eskişehir /Turkey
<b>Can Conta Hırdavat Sanayi</b>	<b>Jan. 2014 – Feb. 2014</b> (15 working days) Eskişehir /Turkey
<b>Tusaş Motor Sanayii A. Ş.</b>	<b>June 2014 – July 2014</b> (15 working days) Eskişehir /Turkey
<b>Kafaoğlu Metal Plastik Mak. San. Tic. A. Ş.</b>	<b>Jan. 2015 – Feb. 2015</b> (15 working days) Eskişehir /Turkey

## **EXAM SCORES**

YDS  
ALES

82.5/100 (May 2014)  
(Quantitative) 82.5/100 (Sept. 2014)

## **COMPUTER SKILLS**

### **Programming Languages:**

MATLAB Intermediate  
Mathematica Advanced

### **Design Softwares:**

AutoCad Advanced  
Autodesk Inventor Advanced  
Solid Edge Advanced  
Solidworks Advanced

### **Analysis Packages:**

ANSYS Elementary

### **Web Design:**

HTML Beginner