

Osman Yavuz PERK

Last Update: June 2010

Home address: TEK Yapı Koop. Ada:174 Parsel:2 No:168 Kizilcasar
06830 Incek/Golbasi, Ankara, Turkey
College address: Sabanci University 34956, Orhanli/Tuzla Istanbul, Turkey
Date / Place of birth: Sep. 22, 1987 / Altindag, Turkey
Home phone: +90 312 460 19 69
Campus Phone: +90 216 483 90 00 / Ext: 2323
Cell phone: +90 505 935 12 42
E-mail: yavuzperk@sabanciuniv.edu

Career Objective

To increase my experience in the fields of automotive, system automation and biomechanics. Also, to pursue a career in which I will require both engineering-technology background and management skills in line with my long-term career plan which is to obtain work experience overseas in the aforementioned areas.

Education

2005 – Present **Sabanci University (SU), Istanbul/TURKEY**
Faculty of Engineering and Natural Sciences (FENS)
Senior, Mechatronics Engineering (ME)
Expected Graduation: June 2010
Current GPA: 3.06 / 4.00

2001 – 2005 **Anatolian High School, Isparta/TURKEY**
GPA: 5.00/5.00

Work Experience

SU Academic

Fall 2009 Graduation Project –Supervisor: Ali Kosar - Drug Delivery System
Description: Designing and developing an independent MEMS device for drug delivery applications. Also performing the production of the device itself.

Summer 2009 Internship Project –University of Waterloo, Canada
Supervisor: Kaan Erkorkmaz
Description: Design and assembly of a cooling system for a newly developed linear motor driven aerostatic micro machining system.

Fall 2008 Project Advisor – Supervisor:Gullu Kiziltas Sendur
Design of a conformal patch antenna

Description: Computer-aided Finite Element Analysis (COMSOL) and use of optimization tools to design material configuration of the antenna. Holding weekly meetings with the supervisor, and mechatronics laboratory group.

Summer 2008

Project Advisor – Instructor: Gullu Kiziltas Sendur

Description: Automation of a sophisticated three-dimensional ceramic and inhomogeneous substrate fabrication procedure using x-y-z controlled linear drives and dispensing unit.

SU Work

Fall 2008

Sabancı Performing Arts Center (aka SGM)

Description: Assistant to main coordinator of the show center, Nalan Aydın. Responsibilities: Welcoming guests and artists, orientation of performers in the show center and Istanbul; English translator for foreign artists and visitors. Coordinating the seat distribution, technical issues, and backstage works. Photography of events and backstage works.

Fall 2008

Peer Tutor, Individual Counseling

Description: Junior or Senior year peer tutors orientate and guide incoming students and follow their social and academic adaption to SU with monthly meetings.

Spring 2008

Product designer, SuChallenge Marketing Challenge

Description: SuChallenge is a marketing game that participants sell SU logo products in a real market. Responsible from the Design of all SuChallenge products.

Summer 2008

Organizer, SERVAS International Youth Meeting 2008

Description: Servas is an international, non-governmental, multicultural peace association run by volunteers in over 125 countries. The international annual meeting took place in SU/ TURKEY. My responsibility was to make all arrangements in SU.

May 2008

Istanbul F1 Grand Prix 2008 Hospitality Team

Description: Welcoming VIP guests and guiding them through the event. Translation aid of foreign guests. Basically, all variety of work relevant to Information Desk.

Course Projects

Fall 2009

Design of a Lab-On-A-Chip System for Semen Analysis

Supervisor: Ali Kosar

Description: Design and optimization of a novel LOC device with integrated camera which is able to perform semen analysis by image processing.

Fall 2009

Piezoelectric Shear Actuated Beam – Supervisor: Serhat Yesilyurt

- Description: Modeling and analysis on a cantilever beam with piezoelectric actuators placed between nickel layers using COMSOL Multiphysics.
- Spring 2009** Design of a reduction gear box for an AC induction motor – Supervisor: Mahmut Aksit
Description: Design of a reduction gear box considering shaft stresses, bearing load calculations, gear ratio and force/torque on gears.
- Spring 2009** Analysis and Synthesis of Mechanisms – Supervisor: Volkan Patoglu
Description: Analysis of a 3-RPR Planar Robot and its workspace. Also design and prototyping of a four bar linkage with fixed pivots.
- Spring 2009** Design and Implementation of an Industrial Control System
Supervisor: Kemalettin Erbatur
Description: Design and Implementation of a small scale industrial model with conveyor belts, sensors, pneumatic pistons and a control panel. Also Visual Basic has been used to design human interface.
- Fall 2008** Design of “Robot Arm” - Supervisor: Mahmut Faruk Aksit
Description: Regardless of motors, cables, gears and electronics, we designed arm (members) with minimum weight and deflection. We analyzed and reported it for static loading and critical stresses. Solidworks used for drawing.
- Fall 2008** Design of “Vending Machine” - Supervisor: Erkey Savas
Description: Design of the circuit of a vending machine which is a coinoperated automat for selling low-valued merchandise. The designed circuit implemented on the FPGA device used during the lab sessions.
- Fall 2008** Design of “Lead-Lag controller” - Supervisor: Kemalettin Erbatur
Description: Design of a controller which satisfied the desired specifications (Rise time, Overshoot, Steady State error) for Maxon DC motor with root locus design techniques. Simulation made in Matlab and Simulink.
- Fall 2007** Construction of “A.M. Radio Receiver” - Supervisor: Meric Ozcan
Description: The aim of the project was to build an A.M. (Amplitude Modulation) radio receiver circuit in order to listen station broadcasting 700 kHz.
- Spring 2006** Design and Construction for “Robot Competition”
Supervisor: Ahmet Onat
Description: Construction of a microcomputer controlled mobile robot which recognized the black colour by using touch and infrared sensors and carried several objects to a stated place.

Achievements

- SU Success Scholarship for 5 years of undergraduate education: awarded for 1614th ranking out of approximately 1.5 million test takers in the 2005 Annual Central Nationwide University Examination
- SU Certificate of Honor for 3 semesters

SU Civic Involvement Projects (CIP¹)

- 2006-2007 Emrullah Turanlı Orphanage - worked with the elementary school students to enhance their social awareness and discover their capabilities.
- 2008 Summer Day, Chief Photographer = coordination of other 6 photographers, making sure that all other photographers took picture in line with the Sponsors' established criteria.

Skills

Computer: C++, Pic Basic Pro, 3d Studio Max, Ms Office, Photoshop, Illustrator, Flash, Matlab-Simulink, COMSOL Multiphysics, SIMATIC

Language: Turkish (native), English (advanced – TOEFL Score 95), Ottoman (intermediate)

SU Student Clubs and Other Activities

Member of SU Computer Club (Executive), Member of SU Robot Club (Vice President 2009, President 2010), Member of SU Photography Club(Executive), Member of SERVAS

Interests

Studio Photography, Graphical Design, Typography, Winter/Racket Sports, 3d Modeling, Travelling

¹CIP : Civic Involvement Projects are hands-on learning program for understanding participatory democracy, where students take active roles in civil society, dealing with various problems and working in cooperation with national and international nongovernmental organizations and state institutions. <http://www.cip.sabanciuniv.edu/>