Emre Savas

PHONE: +44 7512 202145, EMAIL: emresavas89@hotmail.com
HOME ADDRESS: 11 Hever Croft, SE9 3HA, London, UK

WORK EXPERIENCE

APR. 2018 – ONGOING — Research Associate at KING'S COLLEGE LONDON, London, UK
European Robotic Goal-Oriented (ERGO) Autonomous Controller Project
Proactively working on the development of an AI planning software, called *Stellar* (implemented in C++ and Python), to be run on board autonomous spacecraft that will be launched by the European Space Agency (ESA). Collaborating with several multi-national academic and industrial partners (including *Airbus*, *GMV* and *Scisys*). Managing the integration tests of Stellar with the rest of robotic components and interfaces on simulation and physical environments. The project ends on January 2019.

JAN. 2018 – OCT. 2014 — Teaching Assistant at KING'S COLLEGE LONDON, London, UK
Held large-group tutorials and laboratory sessions for various modules (including Introduction to AI, Network Optimisation, AI Planning, Operations Research, Linear Methods) offered by the Faculty of Natural and Mathematical Sciences. Participated in final exam and coursework marking processes of these modules.

FALL 2012 — Bio-mechanics Student at SCHNUCK MARKETS INC., Bridgeton, MO, USA
Used an Electromyograph (EMG) device to measure muscular activities of workers while stacking shelves with or without a stacking equipment, called STOCK AND ROLL. Analysed and interpreted the EMG data using MATLAB, reported that using STOCK AND ROLL decreases muscular activities (and indirectly the fatigue level) by %12.

SUMMER 2012 — ERP Systems Intern at TAV AIRPORTS HOLDING, Istanbul, Turkey
Assisted analysts to migrate ORACLE Release 11 files to Release 12i in concurrent environment. Created and completed test scenarios in supply chain and inventory control modules. Removed unused responsibilities during migration.

EDUCATION

JUNE 2018 — Ph.D. in COMPUTER SCIENCE[†]
King's College London, London, UK
Research Area: Artificial Intelligence Planning
Thesis: "Temporal-Numeric Planning with Control Parameters"
Supervisors: Prof. Derek LONG, Prof. Maria FOX

SEPT. 2014 — M.Sc. in ENGINEERING WITH MANAGEMENT
King's College London, London, UK
Thesis: "Well-Planning and Optimisation for The Oil Industry"
Pass with Distinction | Detailed List of Grades

AUG. 2013 — B.Sc. in INDUSTRIAL ENGINEERING[‡]
Istanbul Technical University (ITU), Istanbul, Turkey
High Honors List, GPA: 3.52/4.00

B.Sc. in INDUSTRIAL ENGINEERING and MANUFACTURING ENGINEERING[‡]
Minor: Mathematical Studies
Southern Illinois University Edwardsville (SIUE), Edwardsville, IL, USA
Senior project: "Manufacturing, Design and Enterprise of a Selective Laser Sintering Prototyping Machine using Chocolate Powder"
cum laude, GPA: 3.74/4.00 | Detailed List of Grades

[†] Fully-funded by the SQUIRREL EU Project: http://www.squirrel-project.eu/
[‡] Both degrees are awarded by the Dual Diploma Program between two institutions.

Training

Sep. 2018	"Functional Programming Principles in Scala" course *on Coursera*.
Jul. 2018	The 2nd Summer School on Cognitive Robotics, MIT, Cambridge, USA.
Jun. 2018	"Algorithmic Toolbox" course *on Coursera*.
	"Python Essential Training" course *on Lynda*.
Apr. 2018	"Java Programming: Arrays, Lists, and Data Structures" course *on Coursera*.
	"Java Programming: Solving Problems with Software" course *on Coursera*.
	"Object Oriented Programming in Java" course *on Coursera*.
Mar. 2016	The 2nd Winter School on SQUIRREL/3rd Hand Projects, Obergurgl, Tirol, Austria.

Computer Skills

Advanced:	C++, C, Java, Scala, Python, PDDL (Lisp-like Language), Fortran, LaTeX, MS office
Intermediate:	ROS, R, MATLAB, unigraphics nx, AutoCAD, vba, HTML, PLC

Publications

1. Emre Savas, Maria Fox, Derek Long, and Daniele Magazzeni. Planning Using Actions with Control Parameters. *In Proceedings of the 22nd European Conference on Artificial Intelligence (ECAI 2016)*, 2016
2. Emre Savas, Chiara Piacentini. Extending a MILP Compilation for Numeric Planning Problems to Include Control Parameters. *Constraints and AI Planning Workshop of the 24th International Conference on Principles and Practice of Constraint Programming (CP 2018)*, 2018
3. Amanda Coles, Andrew Coles, Moises Martinez, Emre Savas, Juan Manuel Delfa, Tomas de la Rosa, Yolanda E-Martin, Angel Garcia-Olaya. Efficiently Reasoning with Interval Constraints in Forward Search Planning, *AAAI 2019*, under revision
4. Emre Okkes Savas. Dissertation Abstract. *International Conference on Automated Planning and Scheduling Doctoral Consortium (ICAPS 2016)*, 2016
5. Emre Okkes Savas, Maria Fox, Derek Long, and Daniele Magazzeni. Task Planning with Control Parameters. *In Proceedings of the 33rd Workshop of the UK Planning and Scheduling Special Interest Group (PlanSIG 2016)*, 2016
6. Michael Cashmore, Maria Fox, Derek Long, Daniele Magazzeni, Bram Ridder, Emre Savas. ROSPlan: Planning in the Robot Operating System. *In Proceedings of the 6th Italian Workshop on Planning and Scheduling (IPS 2015)*, 2015

Academic Experience

- *Innovative Methodology Award winner* at the Fifth International Competition on Knowledge Engineering for Planning and Scheduling (ICKEPS 2016).
- *Program Committee* of the AAAI Conference on Artificial Intelligence (2018 - ongoing).
- *Sub-reviewer* for the IJCAI, the ICAPS conferences (2016 - ongoing).

Leadership Experience

- Co-founder of Tau Beta Epsilon Engineering Honor's Society Chapter at SIUE.
- Vice-President of Institute of Industrial Engineers (IIE) at SIUE, 2012.
- Student Representative of the ITU-SIUE Dual Diploma Program, 2010-2013.
- Team leader of the B.Sc. senior design project. Managed and gave feedback to 15 students during the project, and delivered it to the project investigator in May 2013.

M.Sc. in Engineering with Management

Grades

Module	Grade	Credits
Computer Vision	66	15
Optimization Methods	57	15
Operations Management	90	15
Principles of Management	73	15
Pattern Recognition	78	15
M.Sc. Individual Project	72	60
Project Management	68	15
Robotics Systems	63	15
Real-Time Systems and Control	93	15
	Total	180
	Gpa	**73/100**

B.Sc. in Industrial and Manufacturing Engineering

Grades

Module	Grade	Credit Hours
History of Turkish Revolution I	AA	2
Introduction to Computer and Information Systems	BB	1.5
Calculus I	CC	4
Linear Algebra	AA	3
Physics I	AA	4
Introduction to Industrial Engineering	BB	3
Turkish I	AA	2
History of Turkish Revolution II	BA	2
Fortran	AA	3
Chemistry I	AA	4
Calculus II	BA	4
Physics II	BA	4
Introduction to Manufacturing	AA	3
Engineering Graphics and CAD*	B	3
Statics*	A	3
Principles of Macroeconomics*	B	3
English 101*	A	3
Engineering Problem Solving*	A	3
Calculus III*	B	4
Mechanics of Solids*	A	3
Circuit Analysis I*	B	3
English 102*	A	3
Differential Equations I*	A	3
Dynamics*	B	3
Interpersonal Communication Skills*	A	3
Peoples and Cultures of the East*	A	3
Introduction to I/O Psychology*	B	3

Module	Grade	Credit Hours
Probability	CB	3
Operations Research I	BA	3
Ergonomics	BA	3
Engineering Economy	BA	3
Manufacturing Processes	AA	3
Introduction to Information Processing Systems	AA	2
Just in Time Production Systems	CC	2
Operations Research II	CB	3
Work Analysis and Design	AA	3
Discrete Event Simulation	AA	3
Materials Management	AA	3
Multiple Criteria Decision Making	BA	3
Statistical Methods For Engineers	BA	3
Turkish II	AA	2
3D Modelling and Production Design*	A	3
Plantwide Process Control*	A	3
Tool Engineering*	A	3
Production Planning and Control*	A	3
Facilities Planning*	A	3
Bio-Engineering*	A	3
Materials Engineering*	B	3
Design and Control of Quality Systems*	A	3
CAD/CAM/CAE*	A	3
Manufacturing Engineering Design*	A	3
Integrated Engineering Design*	A	3
Engineering Project Management*	A	3
Thermodynamics I*	A	3
Engineering Ethics*	A	3
	Total	78.5
	Total*	85
	Gpa	**3.52**
	Gpa*	**3.741**

A star (*) indicates that the course was taken at the **Southern Illinois University Edwardsville**, IL, USA