

# Necati Çağatay Gürsoy | Resumé

Address: Yaşamkent Mah. 3085. Sok No:72 Çankaya/Ankara/Turkey, 06810

Electrical and Electronics Engineer pursuing a Master's Degree in Cognitive Science. Passionate about science, transforming fuzzy data into tidy data, machine learning and artificial intelligence with strong theoretical and practical knowledge as well as interpersonal skills for working in a team and successfully completing any given task or project.

## **Education**

Academic Qualifications.....

Middle East Technical University

MSc. Cognitive Science,

**Bilkent University** 

BSc. Electrical and Electronics Engineering,

Gurcag Private High School

Science High,

Ankara, Turkey

February 2017 - Present

Audreus Toules

Ankara, Turkey

September 2011 - January 2016

**Ankara, Turkey** 2007 - 2011

Notable Projects....

 Thesis Research Project: 'Cross-Age Effect in Neural Networks: A Study on Facial Age Recognition Bias in Neural Networks'

Ongoing research project in METU CogSci Department. Project have two stages; first stage is testing facial age recognition bias on humans by showing human faces and asking them to guess the ages. Second stage is to construct a ML system in order to imitate the human performance and contrast the performance between human and the machine.

Initial findings were presented in Second Open Resarch Day of METU Informatics Institute in May 2018. Awarded with a Special Mention.

• Visual Cognition Course Project Paper: 'Visually Salient Art: Comparison of Eye-Tracking Data with Visual Saliency Algorithms on Famous Renaissance Paintings'

The research project was focused to achieve Visual Saliency on couple of Renaissance and Modern Artworks with using California Institute of Technology's MATLAB toolbox SaliencyToolbox. Paper was written during Visual Cognition course.

• Computational Neuroscience Course Project: 'Analyzing Structural Connectivity by Diffusion Tensor Imaging with Tractography on Structural MRI Data'

The research project was focused to analyze the structural connectivity in the brain. A DTI toolbox which was run on MATLAB was used in the project.

#### Notable Courses Taken.....

- Artificial Intelligence for Cognitive Science: Al course designed to fit CogSci purposes. Al agents and Networks were studied.
- Visual Cognition: Course was designed to point out the key points of visual system and visual cognition.

- Computational Models of the Mind: Nengo and ACT-R were encouraged to use to get a grasp on computational models of the human 'mind'.
- o Connectionism and Human Behaviour: PDP and Artificial Neural Networks were the main points.
- Brain Dynamics and Oscillations: During the course, EEG and MEG data were studied to further understand the dynamics of the brain.

## **Teaching Experience**

#### Bilkent University Department of Computer Science

Ankara, Turkey

Teaching Assistant for CS 114 - Programming for Engineers II

September 2015 - January 2016

I worked as a Teaching Assistant during lab hours. The course was focused on JAVA.

## **Bilkent University Department of Computer Science**

Ankara, Turkey

Teaching Assistant for CS 113 - Programming for Engineers I

June - August 2014

I worked as a Teaching Assistant during lab hours. The course was focused on MATLAB.

## Bilkent University Department of Electrical and Electronical Engineering

Ankara, Turkey

Teaching Assistant for EEE 211 - Analog Electronics

February - May 2013

I worked as a Teaching Assistant during lab hours. The course was focused on building an analogue radio.

## **Technical and Personal skills**

- o Spoken Languages: English(Full Professional Proficiency), Turkish (Native), German(Basic)
- Programming Languages: Proficient in: Java, Python, MATLAB, VHDL
  Also basic to mid-level ability with: SPSS, Nengo, ACT-R, VBA, TeX, Arduino, C

## **Test Scores**

- o TOEFL (November 2015): 98 = Reading: 28 / Listening: 27 / Speaking: 22 / Writing: 21
- ALES (November 2015): SAY 80 / EA 82

### References

- Asst. Prof. Murat Perit Cakir Department of Cognitive Science, Graduate School of Informatics, METU E-mail: perit@metu.edu.tr
- Assoc. Prof. Tolga Esat Ozkurt Department of Health Informatics, Graduate School of Informatics, METU E-mail: ozkurt@metu.edu.tr
- Assoc. Prof. Cengiz Acarturk Department of Cognitive Science, Graduate School of Informatics, METU E-mail: acarturk@metu.edu.tr

## Free-Time Activities and Memberships

#### Free-Time Activities.

- o I am interested in reading books and articles especially in European and Turkish history between Ancient Greek times and mid-20th century. Also I am keen on researching European and Middle-Eastern epics.
- o I am also interested in researching (and of course viewing) mid-to-late 20th century Art and so-called 'Contemporary Art'.
- My recent free-time activity is to start-up a YouTube channel where me and couple of my friends would discuss about European and Turkish history and some geeky stuff.

## Membership....

Bilkent Photography Club