

Oya Aran

Curriculum Vitae

Date of Birth: December 20, 1978 (Turkey)

Academic Background

- **PhD student**(September, 2002 - present)
Bogazici University, Department of Computer Engineering
Supervisor: Prof. Dr. Lale Akarun
Stage: Thesis
Research areas: Hand Gesture Recognition, Machine Learning, Computer Vision
- **MS in Computer Engineering** (September, 2000 - July, 2002)
Bogazici University
Supervisor: Prof. Dr. Ethem Alpaydin
Thesis : "Incremental Neural Network Construction Algorithms for Training Multilayer Perceptrons"
- **BS in Computer Engineering** (September, 1996 - July, 2000)
Bogazici University
Supervisor: Prof. Dr. Lale Akarun
Project: Multimedia Earthquake Education, A Game for Kids

Teaching Experience

- **Research and Teaching Assistant**, Bogazici University , TR
Introduction to Computing, C Programming (Spring 2003 – present)
Digital Design (Spring 2001, Spring 2002)
Introduction to Computing, Pascal Programming (Fall 2002)
Object Oriented Programming (Fall 2001)
Software Engineering (Fall 2000, Fall 2001)

Industrial Experience

- **ALARKO A.S.** (January 2000 – October 2000)
Worked as application supervisor for constitution of CRM, OLAP applications.
- **ELIAR A.S.** (March 1997 – October 1997)
Worked as a programmer in the project of "Automation systems for fabric dyeing"

Publications

- Aran, O., Alpaydin, E., "An Incremental Neural Network Construction Algorithm for Training Multilayer Perceptrons", ICANN'03, Istanbul, June 2003.
- Incremental Neural Network Construction Algorithms for Training Multilayer Perceptrons, MS Thesis

Conference /Summer School Talks

- ICANN, Istanbul, Turkey (June, 2003)
- MLSS'04, Berder Island, France (September, 2004)

Languages

- Turkish (native), English (fluent, TOEFL: 257), German (little)

Preferred Projects

1. **Combined Gesture-Speech Analysis and Synthesis**(Coordinators : Profs. Murat Tekalp, Engin Erzin, Yucel Yemez, Mehmet Emre Sargin, Koc University Multimedia, Vision and Graphics Lab, Istanbul).
2. **Speech Conductor** (Coordinator : Prof. C. D'Alessandro, LIMSI-CNRS, Paris)
3. **A Multimodal (Gesture+Speech) Interface for 3D Model Search and Retrieval Integrated in a Virtual Assembly Application** (Coordinator : Prof. Dimitrios Tzovaras ITI-CERTH, Thessaloniki).

List of skills to offer for these projects

My current research, in connection with the SIMILAR project, is on developing applications for controlling windows programs through a gesture interface. My PhD thesis topic is also on a related area, which is the vision based recognition of dynamic hand gestures. I took courses on Speech Processing, Pattern Recognition, Machine Learning, 3D Computer Vision which provide the necessary background for the projects in the eINTERFACE workshop. In these courses, I worked on some projects which are related to the projects in the workshop such as analysis and synthesis of musical voice, motion recognition. I mainly use C/C++, Matlab for programming but can adapt to any programming language in a short time. I believe that I can contribute much to these projects as well as the workshop's contribution to me.

Possibility to bring a laptop? with wireless connection?

I will be able to bring a laptop with wireless connection

Oya Aran

PhD Student
Bogazici University
Computer Engineering Department