

## İSTANBUL TEKNİK ÜNİVERSİTESİ

ELEKTRONİK VE HABERLEŞME MÜHENDİSLİĞİ BÖLÜMÜ

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## BİYOMEDİKAL MÜHENDİSLİĞİ SEMİNERİ

## Variational Techniques in Medical Image Analysis

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İdris Yamantürk Konferans Merkezi

**Salon** 1304

Tarih 8 Nisan 2009, Çarşamba

Saat 13:30

HERKESE AÇIKTIR.

Özetçe: Recently, tools of variational calculus have found extensive applications in computer vision. In this talk, I will present variational approaches to some medical vision problems. I will show various deformable models and their applications in medical image segmentation problems for different structures. I will also talk about estimation of deformable registration between surfaces, and the coupled partial differential equations that we proposed to solve a simultaneous segmentation and registration problem.

Kisa Özgeçmis: Gozde Unal received her Ph.D. in electrical and computer engineering from North Carolina State University, Raleigh, in 2002. She worked as a research scientist at Siemens Corporate Research, Princeton, NJ, USA till 2007. She joined the faculty of Sabanci University, Istanbul, in Fall 2007, as an assistant professor. Her current research is focused on medical image analysis, segmentation, registration, and shape analysis techniques with applications to clinically relevant problems in MR, CT, US, and intravascular images. She is a Senior Member of the IEEE, and an Associate Editor for IEEE Trans. on Information Technology in Biomedicine.