

# Digital Signal Processing at Saitama University

---

*by*

*Prof. Prof. Tetsuya SHIMAMURA*

*Graduate School of Science and Engineering  
Saitama University*

*255 Shimo-Okubo, Sakura-ku, Saitama City, Saitama 338-8570, JAPAN*

**Abstract:**

Prof. Tetsuya Shimamura will present on-going digital signal processing research developed at Shimamura Laboratory from Saitama University. The talk will address results on speech and audio signal processing, image processing and communications. Achievements on speech estimation, pitch detection, bone conduction, beamforming, speech and speaker recognition and watermarking will describe the work of Speech and Audio Group. Other results from Image Processing Group related to denoising, quality assessment and restoration will be shown. Finally, the talk will provide several key issues from Communications Group research activity: spectrum sensing, channel estimation, interference suppression and PAPR reduction for OFDM.