

Shih-Chung Su
 16063 Sierra Pass Way
 Hacienda Hts CA 91745
 (310) 9457443
shihchung.su@ucla.edu

Objective	A MSEE student with background in communications systems, proven C++/Matlab skills and strong analytical ability seeking for digital communications, digital signal processing and software development related job posts.																											
Education	<p><u>University of California Los Angeles, Los Angeles, CA</u> <i>Communications and Telecom, Electrical Engineering, Sep 2005 – Mar 2007</i></p> <ul style="list-style-type: none"> ▪ Overall GPA: 3.59 ▪ Coursework: <table style="margin-left: 20px; border: none;"> <tr> <td style="padding-right: 20px;">Fall 2005</td> <td style="padding-right: 20px;">230A</td> <td>Estimation and Detection in Communication and Radar Engineering</td> </tr> <tr> <td></td> <td>231A</td> <td>Information Theory</td> </tr> <tr> <td></td> <td>232A</td> <td>Stochastic Modeling with Applications to Telecommunication Systems</td> </tr> <tr> <td>Winter 2006</td> <td>230B</td> <td>Digital Communication Systems</td> </tr> <tr> <td></td> <td>230C</td> <td>Algorithms and Processing Communication and Radar</td> </tr> <tr> <td></td> <td>214A</td> <td>Digital Speech Processing</td> </tr> <tr> <td>Spring 2006</td> <td>231E</td> <td>Channel Coding Theory</td> </tr> <tr> <td></td> <td>238</td> <td>Multimedia Communications and Processing</td> </tr> <tr> <td>Winter 2007</td> <td>232B</td> <td>Telecommunications Switching and Queuing Systems</td> </tr> </table> <p><u>National Chiao Tung University, Hsinchu, Taiwan</u> <i>Bachelor of Science, Electrical Engineering, Sep 1999 - Jun 2003</i></p> <ul style="list-style-type: none"> ▪ System-related background including: DSP, Communication System, DSP laboratory courses. ▪ GPA: 81.04/100 	Fall 2005	230A	Estimation and Detection in Communication and Radar Engineering		231A	Information Theory		232A	Stochastic Modeling with Applications to Telecommunication Systems	Winter 2006	230B	Digital Communication Systems		230C	Algorithms and Processing Communication and Radar		214A	Digital Speech Processing	Spring 2006	231E	Channel Coding Theory		238	Multimedia Communications and Processing	Winter 2007	232B	Telecommunications Switching and Queuing Systems
Fall 2005	230A	Estimation and Detection in Communication and Radar Engineering																										
	231A	Information Theory																										
	232A	Stochastic Modeling with Applications to Telecommunication Systems																										
Winter 2006	230B	Digital Communication Systems																										
	230C	Algorithms and Processing Communication and Radar																										
	214A	Digital Speech Processing																										
Spring 2006	231E	Channel Coding Theory																										
	238	Multimedia Communications and Processing																										
Winter 2007	232B	Telecommunications Switching and Queuing Systems																										
Research Experience	<p><u>“On the Application of Game-Theoretic Mechanism Design for Resource Allocation in Multimedia Systems”</u> <i>MS Thesis, UCLA Electrical Engineering, Oct 2006 – Mar 2007</i> <i>Advisor: Professor Mihaela van der Schaar</i></p> <ul style="list-style-type: none"> ▪ Study the application of game-theoretic mechanism design on CPU processing time allocation among multimedia tasks. ▪ Quantify the overhead due to the deployment of mechanism design. ▪ Show that the proposed framework achieves 3dB performance gain over traditional resource allocation algorithm. 																											
Project Experience	<p><u>“Speech Synthesis with Klatt Synthesizer”</u> <i>EE214A, Digital Speech Processing, Winter 2006</i></p> <ul style="list-style-type: none"> ▪ Implement a Klatt Synthesizer in Simulink. ▪ Correlate the mechanism of the synthesizer and the articulation to generate speeches that closely resemble the original real-life ones. ▪ Project score: 19/20 ▪ Tool: Matlab 																											

“Simulation of a Convolutional Coding System”

EE231E, Channel Coding Theory, Spring 2006

- Implement a 64-state rate-1/2 convolutional encoder and decoder.
- Analyze the error performance of the coding system under AWGN.
- Tool: VC++

“Modeling of H.264 Video Decoding Complexity Using Adaptive Linear Prediction”

EE238, Multimedia Communications and Processing, Spring 2006

- Profile the H.264 reference decoder to analyze the decoding complexity of the decoder.
- Model the decoding complexity by the normalized LMS algorithm.
- Utilize the strong correlation between the decoding complexities of I-frames for the complexity modeling.
- Tool: VC++/Matlab

Technical Skill

Languages: Matlab, C/C++, Assembly, VHDL, HTML.
Environment: Matlab/Simulink, Visual Studio, TI Code Composer Studio, Unix

Citizenship

Taiwan

Reference

Professor Mihaela van der Schaar
Engineering IV, 66-147E
Electrical Engineering Department
University of California, Los Angeles
Los Angeles, CA, 90095-1594
Email: mihaela@ee.ucla.edu