

Youzheng Chen

EDUCATION	University of Southern California	Los Angeles, CA
	Master of Science in Computer Science	<i>Aug. 2014 - Present</i>
	Beijing University of Posts and Telecommunications	Beijing, China
	Bachelor of Engineering in Software Engineering	<i>Sept. 2009 - Jun. 2013</i>
WORK EXPERIENCE	University of Southern California	Los Angeles, CA
	<i>Research Assistant</i> (Directed by Prof. Michael Arbib)	<i>June. 2015 - Present</i>
<ul style="list-style-type: none">• Analyzed the effect of different basal ganglia pathways in brain function• Designed and Implemented associative learning model through time		
	Beijing University of Posts and Telecommunications	Beijing, China
	<i>Research Assistant</i> (Directed by Prof. Baozhong Cheng)	<i>Nov. 2010 - June 2014</i>
<ul style="list-style-type: none">• Lead and Implemented Doubango-based IMS UE for teaching cases• Designed access control system and call center based on JAIN SLEE architecture		
RESEARCH EXPERIENCE	University of Southern California	Los Angeles, CA
	<i>MNS-based Neuron Coding on Action and Inaction</i>	<i>June 2015 - Present</i>
<ul style="list-style-type: none">• Analyzed the influence of hyperdirect and indirect pathway on Inaction case• Designed reinforcement learning rules on associative learning through time• Designed basal ganglia model based on Nengo Library		
<i>Deep Learning Model on Rainfall Estimation</i>		<i>Oct. 2015 - Dec. 2015</i>
<ul style="list-style-type: none">• Designed deep learning model based on Marshall-Palmer equation• Implemented layers and nets in neural network based on Caffe Library• Analyzed model performance and predicted rainfall value in Kaggle competition		
<i>Reinforcement-Learning-based Basal Ganglia Model</i>		<i>Feb. 2015 - May 2015</i>
<ul style="list-style-type: none">• Integrated and analyzed the role of the indirect pathway of the basal ganglia• Analyzed reinforcement learning effect under dopamine depletion• Applied reinforcement learning rule on the weights of cortico-striatal connections• Documented relative publications in the Brain Operational Database System		
<i>SL Real-Time Simulation on NAO Robot</i>		<i>Apr. 2015 - May 2015</i>
<ul style="list-style-type: none">• Implemented inverse kinematics algorithm on the control of the COG• Implemented direct kinematics algorithm on the control of robot leg action• Analyzed feedback system using PID control		
<i>Analysis of GPU Virtualization on Cloud Computing</i>		<i>Oct. 2014 - Nov. 2014</i>
<ul style="list-style-type: none">• Analyzed virtualization approaches in modern operating systems• Compared the design of GPU virtualization among VMWare, Xen, etc.• Evaluated the potential research direction on Gaming as a Service (GaaS)		
Beijing University of Posts and Telecommunications		Beijing, China

JAIN SLEE Access Control System & Call Center Nov. 2012 - June 2014

- Developed IMS Media Resource Controller for Interactive Voice Response (IVR)
- Analyzed and Remodeled MRCPv2 Resource Adaptor of JAIN SLEE
- Assembled JVoiceXML and enhanced extensibility of Media Resource Controller

ECHelper Mobile Health System Jan. 2012 - Apr. 2012

- Devised the architecture with Windows Azure, Windows 8, etc
- Programmed hardware driver for ECG sensor to record patient data

Doubango-based IMS UE for Teaching Cases Nov. 2011 - May 2012

- Simplified IMS client and IMS server for Chat Room and Presence Service
- Developed three-week IMS UE teaching experiments

PUBLICATIONS “Research and Implementation of an IMS-based AS/MRFC Model for IVR Services”, **Youzheng Chen**, Baozhong Cheng, and Xiaoyan Zhang, *IT Convergence and Security (ICITCS), 2014 International Conference on*, 2014, pp. 1-5

“Development of Doubango-based IMS UE for Teaching Experiments”, **Youzheng Chen**, Baozhong Cheng, Xiaoyan Zhang, Yi Sun, Jin Xie, and Kun Li, *IT Convergence and Security (ICITCS), 2013 International Conference on*, 2013, pp. 319-322

“Analysis and Design of IMS Services on IMS AS for Teaching Experiments”, Kun Li, Baozhong Cheng, Xiaoyan Zhang, **Youzheng Chen**, Yi Sun, and Jin Xie, *Information Technology and Electronic Commerce (ICITEC), 2013 1st International Conference on*, 2013, pp. 72-75

AWARDS

Scholarship in the People’s Daily Online 2012 Oct. 2012

Third Prize in the Software Design Challenge of Microsoft Imagine Cup 2012 Apr. 2012

Silver Award of the Sixth ACM-ICPC School Contest of BUPT Mar. 2012

Honorable Mentions in the 2012 Mathematical Contest in Modeling Feb. 2012

Second-class Scholarship, Beijing University of Posts and Telecomm. Nov. 2011

Third-class Scholarship, Beijing University of Posts and Telecomm. Nov. 2010

Second Prize in the Chinese Mathematical Olympiad in Senior Oct. 2008

First prize in the National Mathematical Contest for Junior High School Students Apr. 2006

SKILLS

C, C++, C#, Java, Matlab, L^AT_EX, Unix Shell Script