

JARRELL WAGGONER

BIOGRAPHICAL DATA

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EDUCATION

PRESENT PH.D. CANDIDATE IN COMPUTER SCIENCE, **University of South Carolina**
MAY 2009 MASTER OF ENGINEERING IN COMPUTER SCIENCE, **University of South Carolina**
MAY 2006 BACHELOR OF SCIENCE IN COMPUTER SCIENCE, **Bryan College**
MAY 2004 ASSOCIATE OF SCIENCE IN COMPUTER SCIENCE **University of South Carolina at Lancaster**

EXPERIENCE

2011—PRESENT	PROJECT MANAGER AT <i>Palmetto Computer Labs</i> ASSISTED IN PLANNING THE POSSCON CONFERENCE. MANAGED THE OPEN IT LAB AND ASSOCIATED PROJECTS (ANDROID DEVELOPMENT). SOFTWARE SUPPORT FOR WEBSITES AND MANAGED PROJECTS.
2011—PRESENT	RESEARCH ASSISTANT FUNDED BY AFOSR <i>Materials Volume Segmentation</i> DEVELOPED SEGMENTATION METHODS FOR MATERIALS IMAGE VOLUMES IN <i>Python</i> AT THE COMPUTER VISION LAB AT USC. MANAGED LAB COMPUTER NETWORK AND ORGANIZE WEEKLY LAB MEETINGS. CREATED GUI INTERFACE FOR ASSISTED SEGMENTATION, AND CONDUCTED LARGE-SCALE EVALUATIONS ON MULTIPLE DATASETS USING <i>MATLAB</i> FOR METALLIC AND BIOLOGICAL MATERIALS.
2010—2011	RESEARCH ASSISTANT FUNDED BY DARPA <i>Video Event Recognition</i> EXPLORED SEGMENTATION METHODS FOR VIDEO EVENT RECOGNITION. ATTENDED P.I. MEETINGS IN SAN DIEGO (2010) AND COLORADO (2011). DEVELOPED ALGORITHMS IN <i>Scheme</i> TO PROCESS A CORPUS OF THOUSANDS OF VIDEOS EXTRACTED INTO OVER 3 MILLION FRAMES.
2009—2010	NSF FELLOW AT THE USC CENTER FOR DIGITAL HUMANITIES <i>Digital Collation</i> CREATED A DIGITAL COLLATION APPLICATION TO HANDLE AUTOMATIC DIFFERENCING OF SUB-TEXTUAL INCONSISTENCIES AMONG MULTIPLE COPIES OF <i>The Faerie Queene</i> BY EDMUND SPENSER IN <i>MATLAB</i> TO PROCESS TENS OF THOUSANDS OF BOOK PAGE IMAGES.
2008—2009	GK-12 FELLOW AT CRAYTON MIDDLE SCHOOL <i>Teaching 8th Grade Science</i> SERVED IN CRAYTON MIDDLE SCHOOL, COORDINATING WITH THE CLASSROOM INSTRUCTOR TO ENHANCE THE SCIENCE CURRICULUM AND ACTIVITIES IN AN 8 TH GRADE SCIENCE CLASSROOM. SUBSEQUENTLY COORDINATED AND TAUGHT AT THE GK-12 INSTITUTE FOR TEACHERS, PRESENTING THE ACTIVITIES DEVELOPED AND DELIVERED IN THE CLASSROOM.

2007–2011	GRADUATE TEACHING ASSISTANT AT USC <i>Teaching Software Development and Web Scripting</i> SUPERVISED CSCE 145 LABS, COVERING SOFTWARE DEVELOPMENT WITH JAVA, AND TAUGHT CSCE 102, COVERING JAVASCRIPT, HTML, AND CSS. TAUGHT CSCE 211 COVERING DIGITAL LOGIC DESIGN AND CSCE 204 COVERING VISUAL BASIC PROGRAMMING.
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PUBLICATIONS

- [C1] JARRELL WAGGONER, JEFF SIMMONS, AND SONG WANG. COMBINING GLOBAL LABELING AND LOCAL RE-LABELING FOR METALLIC IMAGE SEGMENTATION. IN *Proceedings of SPIE (Computational Imaging X)*, VOLUME 8296, BURLINGAME, CA, 2012.
- [C2] SONG WANG, JARRELL WAGGONER, AND JEFF SIMMONS. GRAPH-CUT METHODS FOR GRAIN BOUNDARY SEGMENTATION. *JOM Journal of the Minerals, Metals and Materials Society*, 63:49–51, 2011.
- [C3] ANDREW TEMLYAKOV, BRENT C. MUNSELL, JARRELL W. WAGGONER, AND SONG WANG. TWO PERCEPTUALLY MOTIVATED STRATEGIES FOR SHAPE CLASSIFICATION. IN *IEEE Conference on Computer Vision and Pattern Recognition*, PAGES 2289–2296, 2010.
- [C4] ZHIQI ZHANG, YU CAO, DHAVAL SALVI, KENTON OLIVER, JARRELL WAGGONER, AND SONG WANG. FREE-SHAPE SUBWINDOW SEARCH FOR OBJECT LOCALIZATION. IN *IEEE Conference on Computer Vision and Pattern Recognition*, PAGES 1086–1093, 2010.

HONORS/AWARDS

2011	GRADUATE STUDENT DAY PRESENTATION, SECOND PLACE	USC
2010	GRADUATE STUDENT DAY PRESENTATION, HONORABLE MENTION	
2006	SENIOR COMPUTER SCIENCE AWARD	Bryan College
2004	CLARA P. HAMMOND AWARD	
	SCIENCE AND MATHEMATICS AWARD	USCL
	HIGHEST ACADEMIC AVERAGE AWARD	

SKILLS & LANGUAGES

» BASH	• • • •	» JAVA	• • • • •	» PYTHON	• • •
» BLENDER	• • •	» JAVACRIPT	• • •	» RUBY	•
» C/C++	• • • •	» \LaTeX	• • • •	» SCHEME	• • • • •
» ENGLISH	• • • • •	» MAPLE	• • •	» SQL	• • •
» GIT/SVN/CVS	• • • •	» MATLAB	• • • • •	» SYS. ADMIN.	• • •
» GNU/LINUX	• • • •	» OPENCV	• • • •	» VISUAL BASIC	• • • • •
» HTML/CSS	• • • •	» PHP	• • • •	» WORDPRESS	• • • •

- SMALL-SCALE PROJECTS AND/OR ASSIGNMENTS
- • IMPLEMENTATION-SPECIFIC EXPERIENCE
- • • QUITE FAMILIAR, USED IN LARGER PROJECTS
- • • • EXTENSIVE KNOWLEDGE OR EXPERIENCE TEACHING
- • • • • USED IN CONTEXT OF LARGE-SCALE AND/OR MULTI-GROUP PROJECTS

INTERESTS AND ACTIVITIES

PROGRAMMING, TEACHING, MATHEMATICS
OPEN-SOURCE SOFTWARE, SYSTEM ADMINISTRATION, LINUX
TYPOGRAPHY, MUSIC COMPOSITION