# JARRELL WAGGONER

## **BIOGRAPHICAL DATA**

BIRTH: LYNCHBURG, VA | 24 SEPTEMBER 1984

ADDRESS: DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING,

UNIVERSITY OF SOUTH CAROLINA, COLUMBIA, SC 29208

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#### RESEARCH INTERESTS

COMPUTER VISION, SEGMENTATION, GROUPING, DOCUMENT IMAGE ANALYSIS, EVENT RECOGNITION, IMAGE PROCESSING, SIGNAL PROCESSING, TOMOGRAPHIC IMAGE ANALYSIS.

## **EDUCATION**

PRESENT PH.D. CANDIDATE IN COMPUTER SCIENCE, University of South Carolina

ADVISOR: DR. SONG WANG

MAY 2009 MASTER OF ENGINEERING IN COMPUTER SCIENCE, University of South Carolina

GPA: 3.8/4.0

MAY 2006 BACHELOR OF SCIENCE IN COMPUTER SCIENCE, Bryan College

GPA: ?.?/4.0 | summa cum laude

MAY 2004 ASSOCIATE OF SCIENCE IN COMPUTER SCIENCE

University of South Carolina at Lancaster

GPA: 4.0/4.0 | summa cum laude

## TEACHING EXPERIENCE

2008–2009 | GK-12 Fellow at Crayton Middle School

Teaching 8th Grade Science

SERVED IN CRAYTON MIDDLE SCHOOL, COORDINATING WITH THE CLASSROOM INSTRUCTOR TO ENHANCE THE SCIENCE CURRICULUM AND ACTIVITIES IN AN 8<sup>TH</sup> GRADE SCIENCE CLASSROOM. SUBSEQUENTLY COORDINATED AND TAUGHT AT THE GK-12 INSTITUTE FOR TEACHERS, PRESENTING THE ACTIVITIES DEVELOPED AND DELIVERED IN THE CLASSROOM.

2007—2008 | GRADUATE TEACHING ASSISTANT AT USC

Teaching Software Development and Web Scripting

SUPERVISED CSCE 145 LABS, COVERING SOFTWARE DEVELOPMENT WITH JAVA, AND TAUGHT CSCE 102, COVERING JAVASCRIPT, HTML, AND CSS.

SPRING 2007 | INSTRUCTOR FOR CSCE 204 AT USCL

Teaching Introductory Programming

HIRED AS SPECIAL FACULTY. TAUGHT INTRODUCTORY VISUAL BASIC FOR MAJORS AND NON-MAJORS. SELECTED TEXTBOOKS, DEVELOPED ALL COURSE MATERIAL, GRADED ALL ASSIGNMENTS. WORKED WITH DR. NONI M. BOHONAK

FALL 2006 | CAMP INSTRUCTOR FOR USCL ARTS AND SCIENCES ADVENTURE CAMP Teaching 5<sup>th</sup>-8<sup>th</sup> Grade Students

Worked in Collaboration with Dr. Dwayne Brown. One of two instructors teaching Math and Computer Science to grade school students.

#### 2003-2007

#### PROFESSIONAL TUTOR AT USCL ACADEMIC SUCCESS CENTER

Tutoring High School and College Students

STUDENT AND GRADUATE TUTOR FOR COLLEGE-LEVEL MATHEMATICS, COMPUTER SCIENCE,

PHYSICS, AND ENGLISH CLASSES.

## RESEARCH EXPERIENCE

#### 2010—PRESENT

#### RESEARCH ASSISTANT FUNDED BY DARPA

Video Event Recognition

EXPLORED SEGMENTATION METHODS FOR VIDEO EVENT RECOGNITION WHILE WORKING AT THE COMPUTER VISION LAB AT USC. MANAGED LAB COMPUTER NETWORK AND ORGANIZE WEEKLY LAB MEETINGS. ATTENDED P.I. MEETINGS IN SAN DIEGO (2010) AND COLORADO (2011). VISITED PURDUE UNIVERSITY WORKING WITH DR. JEFFREY MARK SISKIND (DEC 2010-JAN 2011).

#### 2009-2010

#### NSF FELLOW AT THE CENTER FOR DIGITAL HUMANITIES Digital Collation

CREATED A DIGITAL COLLATION APPLICATION TO HANDLE AUTOMATIC DIFFERENCING OF SUB-TEXTUAL INCONSISTENCIES AMONG MULTIPLE COPIES OF The Faerie Queene BY EDMUND

## **PUBLICATIONS**

- [C1] A. TEMLYAKOV, B.C. MUNSELL, J.W. WAGGONER, AND S. WANG. TWO PERCEPTUALLY MOTIVATED STRATEGIES FOR SHAPE CLASSIFICATION. IN IEEE Conference on Computer Vision and Pattern Recognition, PAGES 2289-2296, 2010.
- [C2] Z. ZHANG, Y. CAO, D. SALVI, K. OLIVER, J. W. WAGGONER, AND S. WANG. FREE-SHAPE SUBWIN-DOW SEARCH FOR OBJECT LOCALIZATION. IN IEEE Conference on Computer Vision and Pattern Recognition, PAGES 1086-1093, 2010.

## **PRESENTATIONS**

- [P1] Aspect-Oriented Programming. IN CSCE 531. GUEST LECTURE FOR DR. MARCO VALTORTA. MARCH 19, 2008.
- [P2] Math 241. Vector Calculus. Guest lecture for Dr. Dwayne Brown. April 23-26, 2007.
- [P3] Math 242. Differential Equations. Guest lecture for Dr. Dwayne Brown. April 23—26, 2007.

## TRAVEL

- [T1] Tomography and its Applications to Materials Science and Non-Destructive Evaluation. ORganizd by M. De Graef, L. Drummy, J. Simmons, M. Comer, C. Bouman, and J. Knopp. AT TECH^EDGE, DAYTON, OHIO. DECEMBER 13-15, 2010.
- [T2] VISITING SCHOLAR. IN COLLABORATION WITH J. M. SISKIND. AT PURDUE UNIVERSITY. DE-CEMBER 6-22, 2010.
- [T3] Mind's Eye Kickoff Meeting. DARPA PROJECT P.I. MEETING. SEPTEMBER 23—24, 2010.

# Honors/Awards

2006 SENIOR COMPUTER SCIENCE AWARD (BRYAN COLLEGE)

2004 CLARA P. HAMMOND AWARD (USCL)
SCIENCE AND MATHEMATICS AWARD (USCL)
HIGHEST ACADEMIC AVERAGE AWARD (USCL)

## TEACHING

## University of South Carolina

SUMMER II 2008 » CSCE 102 HTML/CSS/JAVASRIPT

SPRING 2008 » CSCE 145 LAB JAVA FALL 2007 » CSCE 145 LAB JAVA

UNIVERSITY OF SOUTH CAROLINA AT LANCASTER

SPRING 2007 » CSCE 204 VISUAL BASIC

Spring 2007 » Math 241 Guest Lecture Maple Spring 2007 » Math 242 Guest Lecture Maple

## **SKILLS & LANGUAGES**

» Assembly	• •	» LATEX		» PHP	
» Bash	• • • •	» Linux	• • • •	» Python	• •
» Blender	• •	» LISP	•	» SCHEME	• •
» C/C++	• • • •	» Maple	• • •	» SQL	
» GNU/LINUX	• • • •	» MATLAB		» Sys. Admin.	
» HTML/CSS	• • • •	» MS OFFICE	• • • •	» VISUAL BASIC	
» JAVA	• • • •	» Networking	• • •		
» JAVACRIPT		» OPENCV			

## INTERESTS AND ACTIVITIES

Programming, Teaching, Mathematics Open-source Software, System Administration, Linux Typography, Music Composition