Tara Parker

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EDUCATION

Master of Science, Computer Science
Texas Tech University, Lubbock, TX
Expected Graduation: May 2016

Bachelor of Science, Computer Science
Texas Tech University, Lubbock, TX
Minor: Mathematics
Expected Graduation: May 2016

Related Course Work:

Concepts of Programming Languages	Discrete Computational Structures
Computer Org/Assembly Language	Theory of Automata
Introduction to Artificial Intelligence	Computer Architecture
Design and Analysis of Algorithms	Data Structures
Concepts of Database Systems	Software Engineering
Mathematical Statistics for Engineers	Linear Algebra

ACADEMIC EXPERIENCE

Student Assistant, Grader   Fall 2014 - Present
Computer Science, Texas Tech University

- Work with students to help them solve problems and be successful in their courses
- Maintain grades for many courses
- Monitor classes when professors are away
- Assist professors with their courses

Undergraduate Research - Independent Study   Fall 2013 - Present
Computer Science, Texas Tech University

- Plan, develop, and implement tools for the automated generation of query terms for social media analytics
- Working under the mentorship of Dr. Rattikorn Hewett, with Dr. Phongphun Kijsanayothin and Yi Guo

Research Intern   Summer 2014
Science Undergraduate Laboratory Internships
Computational Sciences and Engineering, Oak Ridge National Laboratory
- Developed and implemented algorithms for predictive model verification and validation.
- Produced proof of concepts for our verification and validation methods using the Bitcoin Transaction Network

Research Intern   Summer 2013
Research Alliance in Mathematics and Science
Computational Sciences and Engineering, Oak Ridge National Laboratory
- Developed and implemented algorithms and noise reduction techniques for big data analytics, including data mining of Twitter using Java, the TinkerPop Stack, and the Neo4J graph database
- Produced network graphs for the visualization of bio-surveillance in social media

Research and Development Intern   Summer 2012
Clinical Quality Workbench
Accenture, Austin, TX
- Worked on an international team to develop an advanced clinical care analytics platform
- Led "From Labs to Reality" meetings
- Worked with clinical experts to ensure accuracy of clinical terminology
- Developed and managed the medical terminology-driven database interfaces

SKILLS & EXPERTISE

Java	Maven	Data Modeling	C++
Python	NetworkX	ASP	Common LISP
Neo4J	Graph Databases	MySQL	Relational Databases
NodeJS	HTML	PHP	UML
Julia	Git	Ruby	VVUQ
LaTeX	Data Mining	Data Analytics	Racket
XML	Big Data	Parallel Processing	Software Development
Linux	Mac OS	Windows	

PROFESSIONAL ORGANIZATIONS

2011 - 2013
Member, *Association for Computing Machinery*

2013 - Present
Member, *Upsilon Pi Epsilon*

2013 - Present
Member, *Sigma Alpha Lambda*

ACADEMIC HONORS AND SCHOLARSHIPS

2014 - 2015, Conoco Phillips Center for Engineering Enrichment and Diversity Scholarship

2013 - 2014, David and Karen Pace Computer Science Endowed Scholarship First recipient

Fall 2013, President's List

Fall 2012, Dean's List

PEER-REVIEWED PUBLICATIONS

Oak Ridge Bio-surveillance Toolkit (ORBiT): Integrating Big-Data Analytics with Visual Analysis for Public Health Dynamics
A. Ramanathan, L.L. Pullum, C.A. Steed, T.L. Parker, S.P. Quinn, C.S. Chennubhotla. Workshop on Public Health's Wicked Problems: Can InfoVis Save Lives?, as part of IEEE Visual Analytics Science and Technology (VAST) 2013, Atlanta, GA. Oct 13, 2013.

Integrating Heterogeneous Healthcare Datasets and Visual Analytics for Disease Bio-surveillance and Dynamics.
A. Ramanathan, L.L. Pullum, C.A. Steed, T.L. Parker, S.P. Quinn, C.S. Chennubhotla. 3rd IEEE Workshop on Interactive Visual Text Analytics, as part of IEEE Visual Analytics Science and Technology (VAST) 2013, Atlanta, GA. Oct 13, 2013.