TARA L. PARKER

www.taralparker.com
(512) · 415 · 4552
taralparker@gmail.com

EDUCATION

Texas Tech University, Whitacre College of Engineering August 2011 - May 2016
Computer Science, B.S. (In Progress)
Minor: Mathematics

Relevant Coursework:

Discrete Computational Structures	Software Engineering
Computer Org/Assembly Language	Theory of Automata
Introduction to Artificial Intelligence	Computer Architecture
Concepts of Programming Languages	Data Structures
Modern Digital System Design	Linear Algebra

WORK EXPERIENCE

Texas Tech University, IT Help Central November 2015 - May 2016
Student Assistant *Lubbock, TX*

- Assisted the unit supervisor with data entry, management, and other various tasks
- Handled all employee files and data including processing hires, promotions, and terminations
- Created and maintained work schedules for all student employees

Texas Tech University, Dept. of Computer Science August 2014 - May 2015
Student Assistant *Lubbock, TX*

- Assisted professors by mentoring students and completing administrative duties
- Facilitated with both graduate and undergraduate courses including Big Data Infrastructure and Data Management, Wireless Networks and Mobile Computing, and Software Engineering

ACADEMIC AND RESEARCH EXPERIENCE

Texas Tech University, Dept. of Computer Science August 2013 - May 2015
Undergraduate Research, Independent Study *Lubbock, TX*

- Researched and implemented an automated tool to build keyword dictionaries for any given topic for use in data mining and analytics
- Used machine learning, data analytics, data mining, and numerical statistics techniques for development and evaluation

Oak Ridge National Laboratory (via SULI) Summer 2014
Research Intern, Science Undergraduate Laboratory Internships *Oak Ridge, TN*

- Worked on verification, validation, and uncertainty evaluation for data clustering algorithms and tools
- Implemented and assessed k-means and Dirichlet process-means clustering algorithms
- Investigated k-means clustering as a method of fraud detection on 8 million+ records from the Bitcoin Transaction Network dataset

Oak Ridge National Laboratory (via RAMS) Summer 2013
Research Intern, Research Alliance in Mathematics and Science *Oak Ridge, TN*

· Researched and developed tools for real-time biosurveillance using social media
· Implemented noise-reduction algorithms and clustering techniques for high volume data streams
· Demonstrated efficacy of our methods with data visualization

Accenture (via Modis) Summer 2012
Research and Development Intern, Clinical Quality Workbench *Austin, TX*

· Worked on an international team to develop an advanced clinical care analytics platform
· Collaborated with clinical experts to ensure accuracy of clinical terminology
· Led "From Labs to Reality" meetings
· Developed and managed the medical terminology-driven database interfaces

TECHNICAL SKILLS AND ABILITIES

Programming Paradigms	Imperative, Functional, Declarative, Object-Oriented, Procedural, Logic
Languages	C/C++, Python, Java, Node.js, ASP, Cypher Query Language, LaTeX, Markdown, Julia, R, Ruby, Common Lisp, Racket
Web Programming	HTML, PHP, JavaScript, CSS
IDE	Eclipse, Visual Studio, JetBrains IDEs, Spyder, DrRacket
Databases	Relational, NoSQL, Graph, Document-Oriented, Data Modeling, SQL, MySQL, Neo4j, MongoDB
Operating Systems	Linux, Mac OS, Windows
Data Science	Data Mining, Data Analytics, Big Data, Machine Learning
Miscellaneous	First-Order Logic, Git, Vim, Microsoft Office, Ability to learn new languages and tools quickly

PROFESSIONAL ORGANIZATIONS

Upsilon Pi Epsilon 2013 - Present
International Honor Society for the Computing and Information Disciplines
Sigma Alpha Lambda 2013 - Present
National Leadership and Honors Organization
Association for Computing Machinery 2011 - 2013
International Learned Society for Computing

ACADEMIC HONORS AND SCHOLARSHIPS

Conoco Phillips Center for Engineering Enrichment and Diversity Scholarship 2014 - 2015
David and Karen Pace Computer Science Endowed Scholarship 2013 - 2014

PEER-REVIEWED PUBLICATIONS

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

A. Ramanathan, L.L. Pullum, C.A. Steed, **T.L. Parker**, S.P. Quinn, C.S. Chennubhotla. (2013) Integrating Heterogeneous Healthcare Datasets and Visual Analytics for Disease Bio-surveillance and Dynamics. *3rd IEEE Workshop on Interactive Visual Text Analytics, as part of IEEE Visualization Conference (Vis)*