

SEAN SANDERS

EDUCATION

University of North Carolina at Chapel Hill

PhD, Computer Science, *May 2016 (expected)*

Concentration: Network Traffic Analysis, Applied Statistics/Machine Learning, and Simulation Modeling

University of North Carolina at Chapel Hill

MS, Computer Science, *Dec 2013*

Concentration: Bioinformatics, Machine Learning, and Optimization

Georgia Institute of Technology

BS, Computer Engineering, *May 2011*

Studied Abroad at Georgia Tech's Campus in Metz, France (Spring 2009)

INDUSTRY & RESEARCH EXPERIENCE

University of North Carolina, Chapel Hill, NC

Graduate Research Assistant,

08/11-Present

SAS Institute, Cary, NC

Data Management Division, Software Tester and Performance Analyst,

05/13-Present

Intel Corporation, Folsom, CA

NAND Products Group, Hardware/Software Engineer and Data Analyst,

05/10-08/10, 05/12-08/12

AT&T Labs-Research, Florham Park, NJ

Traffic Analysis Research Group, Software Developer and Data Analyst,

06/11-05/12

Northrop Grumman Corporation, Electronic Systems, Baltimore, MD

Engineering Tools and Utilization Group, Software Developer,

06/09- 08/09

Georgia Institute of Technology, Atlanta, GA

Undergraduate Research Assistant,

01/08-05/11

TEACHING EXPERIENCE

University of North Carolina, Chapel Hill, NC

Undergraduate Course Instructor (COMP110- Intro to programming),

06/14-07/14
10/12

Graduate Course Guest Lecturer (COMP790-124- Machine Learning in Compbio),

Georgia Institute of Technology, Atlanta, GA

Undergraduate Teaching Assistant (ECE2031- Digital Design Laboratory),

01/10-05/10

OMED Educational Services, Head Tutor (tutored programming, calculus, and statistics),

08/08-12/10

ACTIVITIES AND SERVICE

University of North Carolina, Chapel Hill, NC

Information Technology Administrator, Graduate and Professional Student Federation,

05/13-05/14

Information Technology Public Policy Chair, Graduate and Professional Student Federation,

05/12-05/14

Senate for Department of Computer Science, Graduate and Professional Student Federation,

08/11-05/12

SKILLS

- Programming in MATLAB, C, C++, Perl, R, SQL, Java, SAS, and Python
- Experience using hardware analysis tools including Logic Analyzer, Oscilloscope, VHDL, and SPICE
- Basic knowledge of web technologies including HTML, Javascript, Php, and CSS
- Experience using RDBMS and data access technologies including Oracle, DB2, ODBC, and JDBC
- Modest systems administration experience: Install, configure, manage, and backup databases, and OS configuration
- Some experience administering web applications including Wordpress site, Confluence wiki, and listserv (applications administered serve over 10,000 people) – provided help to users, performed upgrades and/or migrations, managed user accounts, monitored application usage and tuned application(s) when issues occur
- Professional experience in a software engineering role with responsibilities including development, testing, performance analysis and optimization, and failure analysis
- Experience using high performance computing infrastructure including Multi-core systems, Distributed systems (i.e., compute clusters that may or may not use schedulers), and MapReduce Framework (i.e., HDFS)
- Strong knowledge and academic/research/professional experience using applied statistics (regression analysis, exploratory analysis, basic statistical inference – ANOVA, Paired t-tests, etc), time series analysis, machine learning and data mining techniques, convex optimization methods, and simulation models/tools
- Familiar with Windows, Unix, and Linux environments

HONORS & AWARDS

- Awarded Travel Grant to Attend 7th Traffic Measurement and Analysis (TMA) Workshop 2015, 04/15
- IEEE International Conference on Network Protocols (ICNP) PhD Forum Best Paper Award, 10/14
- National Science Foundation Graduate Research Fellowship, 04/11
- AT&T Labs Fellowship, 03/11
- President's Undergraduate Research Award, 01/09, 03/10, 03/11
- Outstanding Service Award as a student in the Opportunity Research Scholars Program, 04/11
- Georgia Tech School of Electrical and Computer Engineering Undergraduate Research Award, 04/10
- Georgia Tech College of Engineering Future Hall of Fame Student, 02/10
- Awarded Best Presentation at Georgia Tech Electrical and Computer Engineering Research Fair, 04/08
- Omnicron Delta Kappa Freshman Leadership Award, 04/08
- Governor's Scholar (Valedictorian of Columbia High School), 05/07

PUBLICATIONS & PRESENTATIONS

- S. Sanders, G. Sanka, J. Aikat, and J. Kaur, “*The Influence of Client Platform on Web Page Content: Measurements, Analysis, and Implications*” (to appear) in *Web Information Systems Engineering–WISE*, Miami, FL, Nov 2015
- S. Sanders and J. Kaur, “*A Graph Theoretical Analysis of the Web Using DNS Traffic Traces*” (to appear) in the *Proceedings of IEEE MASCOTS*, Atlanta, GA, Oct 2015
- S. Sanders and J. Kaur, “*Can Web Pages Be Classified Using Anonymized TCP/IP Headers?*” in the *Proceedings of IEEE INFOCOM*, Hong Kong, April 2015
- S. Sanders and J. Kaur, “*Towards a Framework for Web Page Classification Using Anonymized TCP/IP Headers*” 7th *Traffic Measurement and Analysis (TMA) Workshop* (poster), Barcelona, Spain, April 2015
- S. Sanders and J. Kaur, “*On the Variation in Web Page Download Traffic Across Different Client Types*”, in *Proceedings of the Ph.D. Forum, IEEE International Conference on Network Protocols (ICNP'14)*, Raleigh, NC, Oct 2014.

Best PhD Forum Paper.

- E. Wornyo, A. Ghosh, and S. Sanders, “*Testing Polymer Suitability for Computer Memory Applications*,” *Georgia Tech ECE Poster Fair*, 2008

Best Poster Presentation.