Ashok K. Deb

Lieutenant Colonel, United States Army	**PhD Student, Computer Science**
US Army Student Detachment	**University of Southern California**
ashok.k.deb.mil@mail.mil	**adeb@usc.edu**

706-877-6201

EDUCATION

University of Southern California, Los Angeles, California **Doctorate of Philosophy in Computer Science**	**Ongoing**
Georgia Institute of Technology, Atlanta, Georgia **Master of Science in Operations Research**	**2011**
University of Phoenix, Phoenix, Arizona **Master of Business Administration**	**2009**
United States Military Academy, West Point, New York **Bachelor of Science in Mathematical Sciences**	**2001**

CURRENT PROFESSIONAL SOCIETIES

Armed Forces Communication and Electronics Association (AFCEA)
Association of Computing Machinery (ACM)
Institute for Electrical and Electronics Engineers (IEEE)
Military Operations Research Symposium (MORS)
Pi Mu Epsilon National Honor Society (PME)

EXPERIENCE

Chief of Program and Analysis, Combined Security Transition Command – Afghanistan, Kabul, Afghanistan. Lead a 10-person analytical team to develop the comprehensive plan for the financial investments of the Afghan National Defense Security Forces covering a five year planning period forecasted over $17B. As required, provided actionable and rigorous analysis in support of the Commanding General.	**2016-2017**
Resource Strategy Analyst, Army Pentagon, Washington, DC. Served as a resource strategy analyst for Deputy Chief of Staff G8, Program Development Division, Program Analysis and Evaluation Directorate, HQDA responsible for providing senior Army leadership with independent analysis and recommendations with planning, developing, coordinating, and defending the Army's $600B-plus program.	**2014-2016**
Assistant Professor, Department of Mathematical Sciences, United States Military Academy, West Point, New York. Responsible for teaching Probability and Statistics to 100 students annually. Also conducted academic research in the fields of operations research, mathematics education, and served as the Officer in Charge of the Chess Club.	**2013-2014**
Instructor, Department of Mathematical Sciences, United States Military Academy, West Point, New York. Responsible for teaching Introduction to Calculus & Mathematical Modeling and Differential Calculus to 100 students annually. Also conducted academic research in the fields of operations research, mathematics education, and served as the department social media coordinator and Officer in Charge of the Mathematics Forum.	**2011-2013**

Communication Staff Officer, Multi-National Corps-Iraq, Baghdad, Iraq. Served as an action officer in the current operations cell of a deployed Corps-level staff. Served as the contracting officer representative for the Very Small Aperture Terminal (VSAT) and the Morale, Welfare and Recreation (MWR) Internet Café program for the entire theater of operation.	**2008-2009**
Company Commander, 50th Signal Battalion, Fort Bragg, North Carolina. Leader of a 134-person communication company. Responsible for the training, professional development, health and welfare of the organization. Responsible for the maintenance, accountability, and employment of engineer equipment valued in excess of $35M.	**2006-2008**
Company Executive Officer, 5th Signal Command, Mannheim, Germany. Second-in-charge of a 300-person organization. Responsible for the scheduling, resourcing, and coordinating of all training with unit staff and civilian agencies. Responsible for the maintenance and operational readiness of over $15M worth of communication equipment.	**2004-2006**
Company Executive Officer, 72nd Signal Battalion, Mannheim, Germany. Second-in-charge of a 110-person organization. Responsible for the scheduling, resourcing, and coordinating of all training with unit staff and civilian agencies. Responsible for the maintenance and operational readiness of over $10M worth of communication equipment.	**2003-2004**
Platoon Leader, 72nd Signal Battalion, Mannheim, Germany. Leader of a 44-person communications unit. Responsible for the training, professional development, health and welfare of personnel. Responsible for the maintenance, accountability, and employment of communications equipment valued in excess of $2 million.	**2002-2003**

COURSES TAUGHT

CSCI599 Data Science for Social Systems (Teaching Assistant)	2018
CSCI599 Hacking for Defense (Teaching Assistant)	2018
MA104 Differential (Single-Variable and Multivariable) Calculus (2 semesters)	2014, 2012
MA206 Probability and Statistics (1 semester)	2013
MA103 Discrete Dynamical Systems (1 semester)	2011

REFEREED PUBLICATIONS

L Luceri, A Deb, A Badaway, E Ferrara. "Red Bots Do It Better Comparative Analysis of Social Bot Partisan Behavior." WWW 2019 Companion. arXiv:1902.02765

A Deb, L Luceri, A Badawy, E Ferrara. "Perils and Challenges of Social Media and Election Manipulation Analysis: The 2018 US Midterms." WWW 2019 Companion. arXiv:1902.00043

A Deb, K Lerman, E Ferrara. "Predicting Cyber-Events by Leveraging Hacker Sentiment." Information 9 (11), 280, 2018.

A Deb, et al. "Social Bots for Online Public Health Interventions." 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining.

R Dutt, A Deb, E Ferrara. "Senator, We Sell Ads: Analysis of the 2016 Russian Facebook Ads Campaign." The 2018 International Conference on Intelligent Information Technologies.

A Deb. Teaching Mathematics with the iPad and Social Media. *Mathematica Militaris*, Vol 21, Issue 1, Fall 2012.

CONTRIBUTED CONFERENCE PRESENTATIONS

2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Barcelona, Spain. "Social Bots for Online Public Health Interventions."

2018 Network Science, Paris, France. "On Predictability of Cyber Events by Leveraging Hacker Sentiment" Submission ID: 202.

2013 Hawaii International Conference on Education, Honolulu, Hawaii, *Teaching Mathematics with iPads*. (Paper accepted, unable to attend due to budget constraints)

2013 Joint Mathematics Meetings, San Diego, CA. *iCalculus with iPads*.

2013 Joint Mathematics Meetings, San Diego, CA. *Improving Forward Picking Area Efficiencies in Large Scale Military Warehouses*.

2013 IIE Annual Conference, San Juan, PR. *Statistical Analysis of Body Armor Testing Procedures*.

2013 IIE Annual Conference, San Juan, PR. *Wireless Personal Area Networks*.

2012 IIE Annual Conference, Orlando, FL. *Freight Pricing using Hedonic Pricing Function with Additive Nonparametric Regression*.

WORKSHOP PRESENTATIONS

Facilitator for Professional Military Ethic Education (PME^2), USMA

Master Teacher Program, Center for Teaching Excellence, USMA

SEMINAR PRESENTATIONS

Viterbi PressFriends REACH Symposium. "Global Citizenship for Cybersecurity" 2019, USC

University of San Diego. "Social media, bots and their impact" 2018, USC

Viterbi PressFriends REACH Symposium. "Sentiment Analysis for Cyber Security" 2018, USC

Lunch and Learn Doctoral Seminar Series. "Social Media-Where do we go from here?" 2018, USC

Seminar in Computer Science Research. "Social Media-Where do we go from here?" 2018, USC

How to Prepare for Teaching, Faculty Development Workshop Summer 2012, USMA

Methods for Teaching with iPads with Blaine, K. Center for Faculty Development, USMA

STUDENT DEVELOPMENT

Student Tutor: PPD514: Economic Concepts Applied to Health, PPD510 Financial Management of Health Services, PPD 516 Financial Accounting for Health Care, PPD558 Multivariate Statistical Analysis, USC	2017-2018
Signal Branch Mentorship Program, USMA	2012-2014
Fourth Class Sponsor Program. Sponsored four (4) cadets from USMA 2015	2012-2014
Officer in Charge of the Mathematics Forum, USMA	2012-2014
Officer in Charge of the Chess Club, USMA	2012-2014
Assistant Officer Representative for U.S. Military Academy Preparatory School Golf Team	2012-2014

SERVICE TO DEPARTMENT, USMA AND THE PROFESSIONAL COMMUNITY

Served as Social Media Coordinator for the Math Department, USMA	2012-2014
Served as Math Counselor for Excel Scholarship Program, USMA	2012-2014
Session Chair, Sensors and Signal Processing, IIE Annual Conference	2013
Chair, Hollis Award Committee, USMA Projects Days	2013
Conducted STEM outreach in New York City with Center for Excellence for STEM	2012

HONORS AND AWARDS

Indoctrinated into Pi Mu Epsilon (Mathematics Honor Society)	2000-Present
Academically promoted to Assistant Professor, USMA	2013

RESEARCH FUNDING RECEIVED

Headquarters Department of Army Readiness Study sponsored by the Army Study Program Office, $370,000	2015
Automated feature extraction from streaming video using data mining sponsored by Faculty Research Dean's Fund, $1,200	2013
Statistical Analysis of Body Armor sponsored by PEO Soldier, $60,000	2012
Wireless Personal Area Network sponsored by PEO Soldier, $140,000	2012
Omar Nelson Bradley Research Fellowship in Mathematics $2,000	2012