October 27, 2014

National Security Agency
Attn: CAE Program Manager
9800 Savage Road
Ft. Meade, MD 20755-6744

Re: Support letter for CAE-R Center Designation

Dear Sir/Madam:

It is a pleasure to write this letter of support for the Center for Academic Excellence in Research (CAE-R) at the University of North Texas (UNT). During the last five years more than ten faculty members from four different colleges have been teaching and practicing Information Assurance (IA) at UNT. In particular, we have been teaching and researching IA in computer science and engineering, electrical engineering, information technology and decision sciences, library information systems and criminal justice. The point of contact for the CAE-R at UNT is Professor Ram Dantu from the Department of Computer Science and Engineering.

UNT faculty are primarily doing research in network security, privacy, human interfaces security, and risk analysis. In addition, several faculty are conducting research in cryptography, trusted platforms, secured electronics commerce, advanced access control models, usable security and privacy, secure embedded systems design, and security informatics. All the articles are published in peer-reviewed journals and conferences with a very low acceptance rate.

The University of North Texas has more than ten faculty researching and practicing in IA in several departments in multiple colleges. These departments are: i) Department of Computer Science and Engineering, ii) Electrical Engineering, iii) Department of Information Technology and Decision Science in School of Business, iv) Department of Criminal Justice in College of Public Affairs and Community Service, and v) Department of Library and Information Sciences in School of Information. Hence UNT is uniquely positioned to offer multi-disciplinary IA courses to students across the colleges. All the faculty are teaching IA-concentrated courses
and the majority of them are teaching IA-specific courses. There are nine tenure-track or tenured faculty and a full-time senior lecturer. Currently several IA faculty in UNT are conducting collaborative research with faculty in institutions such as Columbia University, Purdue University, UC Davis, and MIT. During 2014, UNT recruited five faculty members in the cybersecurity area. Dr. Bin Mai joined ITDS in 2014, Dr. Hsia-Ching Chang joined LIS in 2014, Dr. Mark Thompson joined CSE in 2014, Dr. Hassan Takabi joined CSE in 2013 and Dr. Cornelia Caragea joined CSE in 2012. In the long term, we are expecting more academic institutions and government agencies to participate in our research ventures and contribute to their success.

During 2011 Dr. Dantu was invited as a visiting professor in MIT for collaborative research in securing vehicles in the cloud, and securing emergency 9-1-1 services. Dr. Dantu used the results for a field trial with Action Ambulance (a company serving the Boston community). Also, he published papers in the CSIR conference organized by Oak Ridge National Laboratory (ORNL). In addition, Dr. Dantu published papers in security conferences such as PST 2014, LASER 2013, RAID 2013. He also filed for four patents pertaining to the safety of vehicles and 9-1-1 services.

Dr. Takabi has published three journal and two conference papers in 2014. Several faculty members are involved in organizing IA-specific conferences and editing prestigious journals in the field (i.e., Drs. Dantu, Namuduri, and Windsor). Dr. Kamesh Namuduri is editor-in-chief of information security (Taylor & Francis). Further, Dr. Mahadevan Gomathisankaran also had six publications by September 2014. In addition several papers were nominated for best-paper awards. For example, Dr. Murali Varanasi and his student co-authors won the best paper award for the paper titled “Joint Encryption Error Correction and Modulation (JEEM) Scheme” at IEEE CQR 2012.

Faculty have obtained federal-restricted research funding from the National Science Foundation, other federal agencies, and industry partners. In particular, the Center for Decision Sciences and the Center for Digital Knowledge have been continuously receiving funds from industry partners. Dr. Dantu received more than $2.5M for IA-concentrated research and has supported several Ph. D. students. Several of these
NSF awards were received in collaboration with Columbia University, Purdue University, the University of California at Davis, Texas A&M University, and local industry where UNT is PI for all the awards. Four provisional patents were filed based on the work from these awards. Dr. Dantu received the NSF grants related to security and safety of vehicles in the cloud and the SFS scholarship award for Ph. D. students in 2012. Further, Dr. Caragea received two NSF grants of $75K and $244K in 2013 and 2014 respectively. Her security research is interdisciplinary between the College of Engineering and College of Business. Dr. Krishna Kavi and Dr. Gomathisankaran also received NSF funding in 2013 Risk Assessment in Cloud Computing. In addition, Dr. Kavi received several Industry University Cooperative Research Center grants from industry.

Based on past performance, we believe UNT is well positioned to have significant impact in multiple disciplines of information assurance. We are looking forward to continue research and cater to the needs of federal agencies and local industry for the next five years. I strongly support the CAE-R application and will be happy to provide additional information.

Sincerely,

Barrett Bryant
Professor and Chair