

Tommy Dang, PhD

Phone: (+1) 806-319-3156

Email: tommy.dang@ttu.edu

Website: <http://www.myweb.ttu.edu/tnhondan/>

RESEARCH INTERESTS

Developing methods and tools for visual analytics – an integrated approach combining visualization, human factors and data analysis to derive insight from massive, dynamic, and ambiguous data.

EDUCATION

2010- 2014: Ph.D. in Computer Science, University of Illinois at Chicago, IL

2008-2009: M.Sc. in Computer Science, University of Illinois at Chicago, IL

2006-2008: M.Sc. in Computer Engineering, Politecnico di Milano, Italy

2001-2006: B.Sc. (with honor) in Computer Science, Ho Chi Minh City University of Technology, Vietnam

WORK EXPERIENCE:

August 2016 – Present

Assistant professor at Texas Tech University, Lubbock, TX

August 2014 – July 2016

Postdoctoral researcher in biological network visualization at UIC Electronic Visualization Lab

September 2015 – June 2016

Consultant in network visualization for Objectivity Inc, San Jose, CA.

July 2014 – January 2015

Consultant in data visualization for Skytree - The Machine Learning Company.

August 2011 – July 2014

Research assistant in the Computer Science Department at University of Illinois at Chicago, IL

May 2011 – August 2011

Research assistant in the Learning Science Department at University of Illinois at Chicago, IL

January 2009 – May 2011

Research assistant in the National Center for Data Mining at University of Illinois at Chicago, IL

June 2005 - August 2005

Engineering Internship at Paragon Solutions Vietnam, Ho Chi Minh City, Vietnam.

GRANTS:

[G10] Space Telescope Science Institute: *Validating JWST's in-orbit clock accuracy* (2023-2024). Role co-PI.

[G9] AVX Aircraft – U.S. Army: *Soldier Information Interface for Aviation Fleet Management Tool* (2021-2022). Role co-PI

[G8] Texas Department of Transportation: *Technical Support for Rigid Pavements and Concrete Materials Branch* (2021-2022). Role co-PI

[G7] DOE Funding through Cybersecurity Manufacturing Innovation Institute: *Intelligent Visual Analytics for Energy Aware Security of Advanced Manufacturing* (2021-2024). Role co-PI

[G6] AVX Aircraft – U.S. Army: *Interactive Data Visualization for Rotorcraft Automated Component Tracking* (2020-2021). Role PI

[G5] NSF Phase-II IUCRC: *Center for Cloud and Autonomic Computing* (2020-2024). Role co-PI

[G4] NSF IIP: *Intelligent visual framework for analyzing chemical measurement data* (2020-2022). Role PI

[G3] Dell Inc. support through the NSF IUCRC program: *Visualizing, monitoring, and predicting health*

status of HPC centers (2019-2023). Role PI

[G2] AVX Aircraft – U.S. Army: *Multi-Source Data Fusion* (2019-2020). Role co-PI

[G1] SGIR Proposal: *Teaching Foreign Language Pronunciation through Educational Avatars*. The Seed Grants for Interdisciplinary Research at Texas Tech University. Role co-PI

AWARDS:

[A6] Honorable Mention: An Interactive Visual Analytics System for Misclassification Correction and Analysis. Mini-Challenge 2, VAST 2020.

[A5] Spirit of NSF I-Corps Award: The recognition for the team most exemplifying the spirit of I-Corps, the hard work, discipline, and intellectual honesty.

[A4] Visualization Showcase Award at PEARC 2019: HiperViz: Interactive Visualization of CPU Temperatures in HPC Centers.

[A3] Best paper at EnvirVis 2019: Visualizing water/soil chemical measurements via portable X-ray fluorescence (PXRF) spectrometry.

[A2] Award: *Strong Support for Exploratory Analysis*. VAST Challenge 2018: Mini-Challenge 2, VAST 2018.

[A1] Honorable Mention: *Representation of Small-Scale Temporal Patterns*. VAST Challenge 2018: Mini-Challenge 3, VAST 2018.

INVITED TALKS:

2020: Introduction to Computer Science. WCOE 2020 Summer Camp. Faculty talk (Online)

2020: Visual Analytics for high-dimensional and time-series. Spring 2020 NSF CAC Industry Advisory Board. Keynote Speech (Online)

2020: Multidimensional Time Series Visualization. TTU Computer Science departmental seminars. Lubbock, TX

2019: Visual analytics and Virtual Reality. The Cognition & Cognitive Neuroscience area of Experimental Psychology. Lubbock, TX

2018: VR and AR in Unity. Lab Innovations with Technology. Webinar with Cal State faculty Slides

2018: Data-center Automation, Analytics, and Control with Redfish. Dell EMC booth. Kay Bailey Convention Center Dallas, TX Slides DEll 2018 Dell EMC booth

2018: Visualizing, Monitoring, and Automating Data Centers. Fall 2018 NSF CAC Industry Advisory Board Meeting. Denton, TX

2017: *Visualizing Biological Pathways through Multiple Layers of Abstraction*. Bio-IT World Conference & Expo. Cambridge Healthtech Institute in Boston, MA

2016: *Data visualization and visual analytics*. TTU Computer Science departmental seminars.

2015: *Feature-based Visual Analysis*. Chicago Chapter ACM. Chicago, IL.

2014: *Feature-based Visual Analysis*. Skytree tech talk, 2014. San Jose, CA

2013: *Interactive Visual Analysis of Images*. Doctoral Colloquium, IEEE VisWeek. Atlanta, GA.

ACTIVITIES:

2018-Present: Program Committee of the 12th ACM Conference on Recommender Systems and Big Data Engineering and Analytics in Cyber-Physical Systems (BigEACPS'18)

2016-2018: Graduate Program Committee, course Equivalent Evaluator, and Admission Committee.

2015-2016: Website chair of the 5th Symposium on Biological Data Visualization (BioVis 2015 and 2016).

2015-2020: Reviewer for IEEE Symposium on Information Visualization, IEEE Conference on Visual Analytics Science and Technology, IEEE Scientific Visualization, EG/VGTC Conference on Visualization, IEEE Pacific Visualization.