

EDUCATION

Texas Tech University, Lubbock, TX 08/2018 — present

Doctoral degree in Computer Science, research areas of Data Visualization and Visual Analytics

• Awards and Honors:

2020 IEEE VAST Challenge, *Honorable Mention* for Detailed Analysis of Patterns of Misclassification [\[demo & video\]](#)

Gelin Graduate Scholarship, Whitacre College of Engineering Scholarship

• Professional Development: Member, Interactive Data Visualization Lab; Presenter, Scientific Computing meets Machine Learning & Life Sciences Workshop; Co-organizer, Tech Women in High Performance Computing

Hanoi University of Science and Technology, Hanoi, Vietnam 09/2013 — 06/2018

Bachelor of Science in Information Systems, 5-year Engineer Program

• Thesis: "Multi-label Image Classification on a Real-life Photo Gallery with MobileNetv2"

• Honors: Temasek Foundation Singapore Full Scholarship for Specialists' Community Action & Leadership Exchange (Top **0.5%**), Excellence Scholarship (Top **1%**) in recognition of outstanding academic performance

WORK EXPERIENCE

Teaching Assistant — *Department of Computer Science, Texas Tech University* 08/2019 — 01/2020

- Graduate courses: Intelligent Systems (41 students), Logic for Comp. Scientists (41 students)
- Undergraduate courses: Intro to Artificial Intelligence (50 students), Software Engineering II (65 students)
- Helped students with coursework inquiries, graded and updated assignments and programming source codes
- Developed and presented tutorials on modeling, analysis with the User Requirements Notation, jUCMNav

Research Assistant — *Interactive Data Visualization Lab, Texas Tech University* 08/2018 — 05/2019

- Developed web-based interactive visualizations that support visual representation of structured and unstructured data, including qualitative and quantitative data, with D3js and Python.
- Enhanced understanding of data by analyzing and discovered insights with visualization and visual analytics.
- Collaborated with domain experts for conducting case studies and model evaluation in practice: High Plains Underground Water Conservation District and Southern Great Plains Soil Survey Region 9 at Lubbock, Texas, USA.
- Wrote and published two conference papers and one journal article in peer-reviewed venues and journal

Big Data Engineer, Intern — *VC Corp, Hanoi, Vietnam* 06/2016 — 08/2016

- Implemented Hadoop and Apache Spark processing frameworks to perform distributed computing in large clusters.
- Contributed to anomaly detection project on system metadata.
- Implemented MapReduce framework to solve the file storage issues using Maven project in Java.

FUNDED GRANT

NASA, administered by Gordon Research Conferences: Visionary Research Grant, Visualizing Qualitative Data for Science and Education, **\$10,000**, with Caleb M. Trujillo, University of Washington Bothell; Kathleen Jeffery, University of New Hampshire and Kevin Wee, Purdue University.

FEATURED PUBLICATIONS

[full list of publications](#) 

- **Nguyen, H. N.** et al. (2020). VisMCA: A Visual Analytics System for Misclassification Correction and Analysis. **VAST 2020 Mini-Challenge 2 Award: Honorable Mention** for Detailed Analysis of Patterns of Misclassification. *IEEE Conference on Visual Analytics Science and Technology (VAST) (To appear)* [\[preprint\]](#) [|](#) [demo](#) [|](#) [code](#)
- Dang, T., **Nguyen, H. N.**, and Pham, V. (2019). WordStream: Interactive Visualization for Topic Evolution. **EuroVis 2019 Short Papers**. *The Eurographics Association*. <https://doi.org/10.2312/evs.20191178> [\[demo\]](#) [|](#) [code](#) [|](#) [JavaScript library](#)

INVITED TALKS

- **Nguyen, H.** (2020). Data Visualization and Applications. Talk presented at the Advanced Wireless Communication Networks (AWCN) Laboratory, Thai Nguyen University of Technology, Thai Nguyen, Vietnam.
- Dang, T. and **Nguyen, H.** (2019). Visual Analytics and Virtual Reality. Talk presented at the Cognition and Cognitive Neuroscience area of Experimental Psychology, Department of Psychological Sciences, Texas Tech University, Lubbock, TX.