

## EXPERIENCE

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<b>Teaching Assistant</b>	<b>Texas Tech University</b>	<b>Fall 2019</b>
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Department of Computer Science

- Courses: Intelligent Systems, Intro Artificial Intelligent, Logic for Comp. Scientists, Software Engineering II.
- Assisted instructors in managing the evaluation of course assignments, exam papers and source codes.
- Held office hours with students to review materials, provided timely feedback with assignment inquiries.

<b>Research Assistant</b>	<b>Texas Tech University</b>	<b>Fall 2018 – Spring 2019</b>
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Interactive Data Visualization Lab

- 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.

<b>Big Data Engineer, Intern</b>	<b>VC Corp</b>	<b>Summer 2016</b>
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- Implemented Hadoop and Apache Spark processing frameworks to perform big data-related tasks.
- Contributed to anomaly detection project on system metadata.
- Implemented MapReduce framework to solve the file storage issues using Maven project in Java.

<b>Research Student Assistant</b>	<b>Hanoi University of Science and Technology</b>	<b>Fall 2015 – Spring 2018</b>
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Data Science Lab

- Evaluated different object detection models on real-life image dataset.
- Implemented convolutional neural networks for object detection tasks with TensorFlow library.

## EDUCATION

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<b>Lubbock, TX</b>	<b>Texas Tech University</b>	<b>Fall 2018 – Present</b>
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- Ph.D. Student in Computer Science.
- Research area: Data Visualization and Visual Analytics

<b>Hanoi, Vietnam</b>	<b>Hanoi University of Science and Technology</b>	<b>Fall 2013 – Spring 2018</b>
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- B.S. in Information Systems, 5-year Engineer Program.
- Thesis: “Multi-label Image Classification on a Real-life Photo Gallery using Deep Learning.”

## PROJECTS

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- **Misclassification Correction and Analysis** (2020). Interactive visual analytics system supporting detailed analysis of patterns of misclassification. D3js, JavaScript, Python
- **Visualizing Qualitative Data for Science and Education** (2019-). NASA, administered by Gordon Research Conferences: Visionary Research Grant, \$10,000, with C. Trujillo, K. Jeffery, and K. Wee.
- **WordStream** (2019). Interactive visualization for topic evolution, demonstrated helpful to explore the longitudinal, qualitative data in social media and educational domains. D3js, JavaScript
- **Earthquake Situational Analytics** (2019). Interactive dashboard supporting users to characterize the condition across the earthquake zone: related events, resources, and responses from the community. D3js, JavaScript

## HONORS AND AWARDS

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- **VAST Challenge**, Honorable Mention for Detailed Analysis of Patterns of Misclassification: 2020
- Texas Tech University, Whitacre College of Engineering DesigENGR Scholarship: 2018 and 2019

## PUBLICATIONS

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2020

8. **Nguyen, H. N.**, Gonzalez, J., Guo, J., Nguyen, N. V.T., and Dang, T. (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)*.
7. **Nguyen, H. N.**, Nguyen, V.T., and Dang, T. (2020). Interface Design for HCI Classroom: From learners' perspective. *International Symposium on Visual Computing (To appear)*.
6. Dang, T., Pham, V., **Nguyen, H. N.**, and Nguyen, N. V. (2020). AgasedViz: Visualizing Groundwater Availability of Ogallala Aquifer, USA. *Journal of Environmental Earth Sciences*, 79(5), 1-12.
5. Dang, T., Van, H., **Nguyen, H. N.**, Pham, V., and Hewett, R. (2020). DeepVix: Explaining Long Short-Term Memory Network with High Dimensional Time Series Data. *Proceedings of the 11th International Conference on Advances in Information Technology (IAIT2020)*, 1-10.

2019

4. Dang, T., **Nguyen, H. N.**, and Pham, V. (2019). WordStream: Interactive Visualization for Topic Evolution. In Johansson, J., Sadlo, F., and Marai, G. E., editors, *EuroVis 2019 - Short Papers*. The Eurographics Association.
3. **Nguyen, H. N.** and Dang, T. (2019). EQSA: Earthquake Situational Analytics from Social Media, *IEEE Conference on Visual Analytics Science and Technology (VAST)*, Vancouver, BC, Canada, 142-143.
2. Le, D., Pham, V., **Nguyen, H. N.**, and Dang, T. (2019). Visualization and Explainable Machine Learning for Efficient Manufacturing and System Operations. *Smart and Sustainable Manufacturing Systems*, 3(2), 127-147.
1. Van, H., **Nguyen, H. N.**, Hewett, R., and Dang, T. (2019). HackerNets: Visualizing Media Conversations on Internet of Things, Big Data, and Cybersecurity. *BigEACPS'19 at IEEE International Conference on Big Data (Big Data)*, 3293-3302.