Liudas Panavas

610-906-5941 **panavas.l@northeastern.edu** **https://lpanavas.github.io/personalSite/**

Education:

PhD Student - Northeastern University; Boston, MA **Started Fall 2020**
Major, Computer Science **Cumulative GPA: 3.88**

University of South Carolina; Columbia, SC **Graduated: December, 2019**

Major, Mechanical Engineering **Cumulative GPA: 3.88**

Minor, Computer Science

Research Experience:

Data Visualization Lab at Northeastern

Researcher; Boston, MA *August, 2020 – Present*

- Investigating how to improve private machine learning data generation to increase data utility
- Created explainable AI visual interface prototype for comparing UAV object detection algorithms
- Benchmarked the visual utility of a variety of differentially private algorithms for scatterplots
- Identified methods to connect 3D to 2D views of brain arteries for stroke diagnosis
- Conducting a user study of graphical perception on children to ensure guidelines are generalizable
- Conducted a design study with Data Tecnica International creating a genomics visualization
- Created a virtual reality interface to test the pop out effect of binaural sound in a VR environment

Research at McNair Center

Undergraduate Researcher; Columbia, SC *September, 2015 – December 2019*

- Developed software funded by NASA to find layup strategies based for automated fiber placement
- Awarded NSF I-Corps grant to investigate commercial viability of supplier ranking software
- Created software coded in Java for Boeing that ranks suppliers based on customer criteria
- Submitted two papers for publication regarding the improvement of underperforming suppliers
- Presented talk at the international PLM 2017 conference regarding a part criticality index
- Awarded 4 grants from USC to pursue research in automated fiber placement and supplier evaluation

Karlsruhe Institute of Technology

Research Assistant; Karlsruhe, Germany *May, 2019 – August, 2019*

- Developed python code to create 3D geometries from point clouds in Abaqus from 2D planes of points
- Worked in a team to automate simulation of topology optimization for 3D printed parts

University of Technology of Compiegne

Research Assistant; Compiegne, France *June, 2017 – August, 2017*

- Created an algorithm to model a factory involving cellular manufacturing and mass customization
- Created initial reports and state-of-the-art that led the EU to select the project for three years of funding

Publications/Conferences

- Panavas, L., Crnovrsanin, T., Adams, J. L., Sarvghad, A., Tory, M., & Dunne, C. (2022). Visual Utility Evaluation of Differentially Private Scatterplots. https://doi.org/10.31219/osf.io/5t68s

- Panavas, L., Worth, A. E., Crnovrsanin, T., Sathyamurthi, T., Cordes, S., Borkin, M. A., & Dunne, C. (2022). Juvenile Graphical Perception: A Comparison between Children and Adults. In *CHI Conference on Human Factors in Computing Systems* (pp. 1-14). https://doi.org/10.1145/3491102.3501893
- Saffo, D., Di Bartolomeo, S., Panavas, L., Yildirim, C., & Dunne, C. (2021). Two paths towards the future of remote studies using social VR. https://doi.org/10.31219/osf.io/4we6g
- Saidy, C., Pinna, C., Wilson, Z., Panavas, L., Harik, R., & Bayoumi, A. M. (2018). Literature review of current practices of supplier's assessment and valuation of decisions regarding underperforming suppliers. International Journal of Product Lifecycle Management, 11(3), 245-267. https://doi.org/10.1504/IJPLM.2018.094719
- Saidy, C., Panavas, L., Harik, R., Bayoumi, A. M., & Khoury, J. (2017, July). Development of a Part Criticality index in inventory management. In *IFIP International Conference on Product Lifecycle Management* (pp. 184-195). Springer, Cham. https://doi.org/10.1007/978-3-319-72905-3_17

Professional Experience

ANSYS

Software Tester Co-op; Pittsburgh, PA *August, 2018 – December, 2018*

- Created automated tests that analyzed the newest ANSYS products related to additive manufacturing
- Performed function, application, regression, and interactive tests on new Additive Print feature
- Ensured product was ready for deployment in final stages of development
- Maintained and updated servers and programs to automate regression tests

---

Skills:

- JavaScript, NodeJS, D3, React, Python, Plotly, Dash, Matplotlib, GIT, SQL, Differential Privacy

Honors/Activities:

- McNair Scholar, 2015-2019, Top Academic Scholarship at University of South Carolina
- Dean's List, 2015-2019
- Magellan Mini-Grant, 2019
- E. Wayne Kim SME undergraduate Scholarship 2017-2018
- NSF I-Corps Grant recipient, 2018
- Magellan Grant recipient, 2017
- University of South Carolina Surf grant recipient (3), 2016 - 2017
- McNair Junior Fellow, 2016
- Lieber Scholar, 2015
- National Merit Scholar, 2014

Organizations:

- PhD Curriculum Committee Student Ambassador, Northeastern
- SME (Society of Manufacturing Engineers), Founder, USC
- SAMPE (Society for the Advancement of Material and Process Engineering), Webmaster, USC

Languages:

English, Lithuanian