**Liudas Panavas**

**610-906-5941 panavas.l@northeastern.edu**

**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*

* Benchmarked the visual utility of a variety of differentially private algorithms for scatterplots
* Investigated how well statistical measures of utility correspond to ground truth of human perception
* Explored methods to increase the visual utility of visualizations without adjusting the underlying data
* Identified methods to connect 3D to 2D views of brain arteries for stroke diagnosis
* Updated PROTECT environmental researchers’ database interface to increase data accessibility
* 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
* Wrote tutorials and documentation for software that improved clarity and usability of application
* 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
* Delivered a detailed 75 page report regarding the reduction and quantification of layup defects

**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

**University of South Carolina Engineering Department**

*Teacher’s Assistant, Statics; Columbia, SC August, 2016 – December, 2016*

* Set scoring standards and graded student’s assignments and tests for a class of 45
* Received an evaluation of 4.92 out of 5 from end of semester student evaluations

**Publications/Conferences**

* Panavas, L., Worth, A. E., Crnovrsanin, T., Sathyamurthi, T., Cordes, S., Borkin, M. A., & Dunne, C. (2022, April). Juvenile Graphical Perception: A Comparison between Children and Adults. In *CHI Conference on Human Factors in Computing Systems* (pp. 1-14).
* Saffo, D., Di Bartolomeo, S., Panavas, L., Yildirim, C., & Dunne, C. (2021). Two paths towards the future of remote studies using social VR.
* 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.
* Saidy, Clint, Liudas Panavas, Ramy F. Harik and Joseph Khoury. “Development of a Part Criticality Index in Inventory Management.” (2017); Presented at PLM 2017, July 10-12, Seville, Spain
* Panavas, Liudas, Plikynas, Darius. “Social Capital Effects on Migration Flows in a Modern Global Society” (2019); Presented at MSBC 2019, September 18-20, Vilnius, Lithuania

**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

**Geo Systems Design and Testing**

*Field Technician; Columbia, SC March, 2016-May, 2016*

* Performed laboratory tests to ensure soil and concrete were up to national regulation standards
* Cross-referenced data obtained from tests with graphical models to create detailed reports

**Service Experience**

**Society of Manufacturing Engineers** *October, 2016 – December 2018*

*Founder, President; Columbia, SC*

* Led a chapter at USC to increase education and awareness of the manufacturing community
* Organized over 15 talks and factory visits to provide students with firsthand experiences

**IdeaSC** *September, 2016 – May, 2017*

*Chief Marketing Officer; Columbia, SC*

* Helped start a non-profit to find creative ways to educate communities in South Carolina
* Organizing TEDxUofSC in to spread student’s ideas at University of South Carolina
* Creating a media plan for TEDxUofSC to attract audience and speakers from diverse backgrounds

**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

**Skills:**

* JavaScript, NodeJS, D3, React, Python, Plotly, Dash, GIT, SQL

**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