Liudas Panavas

CONTACT INFORMATION

Email: panavas.l@northeastern.edu **Location:** Boston, MA
Website: `https://lpanavas.github.io/#/`
Phone: (610) 906-5941

EDUCATION

Northeastern University, Boston, MA 2020 - PRESENT
PhD Computer Science; Advised by Prof. Cody Dunne

University of South Carolina, Columbia, SC 2015 - 2019
B.S. Mechanical Engineer, Minor: Computer Science.

RESEARCH EXPERIENCE

Northeastern University, Boston, MA AUGUST 2020 - PRESENT
Data Visualization Lab
Conducting studies and creating visual tools to help make differential privacy usable

- Creating web-based tool to visually explain DP privacy parameter's impact on accuracy.
- Conducted interviews with 18 DP practitioners to identify real world deployment challenges.
- Evaluated and benchmarked visual utility of 5 popular differential privacy algorithms (Paper Link).

Deploying HCAI visual interface to compare object detection model outputs

- Wrote algorithms to parse object detection model outputs into set visualizations.
- Deployed jupyter lab extension as a python package to explore bounding box detections

Conducted foundational research of data visualization perception

- Conducted a quantitative user study on children's graphical perception (Paper Link).
- Ran study to compare pop out effects in a VR environment vs a desktop environment.

University of South Carolina, Columbia, SC SEPTEMBER 2015 - DECEMBER 2019
McNair Research Center

- Worked on visual analytics systems for automated fiber placement layup strategies.
- Awarded 4 grants from USC to research automated fiber placement and supplier evaluation.

WORK EXPERIENCE

Nokia Bell Labs, Cambridge, UK JUNE 2023 - SEPTEMBER 2023
Data Science Research Intern
Worked with the Social Dyanamics team exploring the areas of computational social science and responsible AI

- Engineered a full-stack interactive survey deployed on AWS to gauge public opinion on the EU AI Act.
- Conducted quantitative data on 400 survey participants responses for AI policy recommendations.
- Employed prompt engineering and LLMs to classify various AI technologies into risk categories.

Harvard Privacy Tools Project, Cambridge, MA JUNE 2023 - SEPTEMBER 2023
OpenDP Fellow
OpenDP is a community working towards building tools to enable sharing of sensitve data through differential privacy.

- Interviewed practitioners on their experiences learning and deploying differential privacy.
- Designed a website to help educate and simulate differential privacy deployments.

ANSYS, Pittsburg, PA AUGUST 2018 - DECEMBER 2019
Software Tester
ANSYS creates engineering simulation software.

- Performed function, application, regression, and interactive tests on new Additive Print feature.

Software Skills

Web Development: React, Node.js, Express, MongoDB, MySQL, Amazon Web Services (AWS), Figma
Data Visualization: D3, Plotly, Matplotlib, Tableau
Languages & Tools: Python, Javascript, GIT, Jupyter Widgets
Research: Differential Privacy, Useable Privacy, Computer Vision, Object Detection, Explainable AI, Human Computer Interaction, Quantitative Analysis, Qualitative Analysis, Interview Studies

---

Leadership

Northeastern Graduate Student Social Committee 2022 - 2023
President
The social committee was started to help foster community amongst Northeastern graduate students.

- Managed $15,000 dollars to put on weekly lunches alongside monthly outtings
- Organized end of semester dinner for over 90 graduate students

Northeastern PhD Curriculum Committee 2020 - 2021
Student Representative

- Communicated with faculty to ensure professors updated course curriculum to requirements.

Awards and Memberships

McNair Scholar (highest academic honor at USC) 2015 - 2019
Dean's List 2015 - 2019
USC SURF grant recipient 2016, 2017, 2018
NSF I-Corps Grant recipient 2018
E. Wayne Kim SME undergraduate Scholarship 2017

Mentorship

Hari Bhimaraju, Columbia University 2023
Wynee Pintado, Columbia University 2023
Tejas Sathyamurthi, Northeastern University 2021

Publications

1. **Panavas, L.**, Crnovrsanin, T., Adams, J. L., Ullman, J., Sargavad, A., Tory, M., & Dunne, C. (2023). *Investigating the Visual Utility of Differentially Private Scatterplots.* TVCG, Paper.
2. **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.* CHI 22, Paper