Darius Coelho

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EDUCATION Stony Brook University, Stony Brook, NY

Sep. 2012 – May 2021

Ph.D. in Computer Science, Advised by Prof. Klaus Mueller

(Expected)

Thesis: Methodologies to Enable General Participation in Data Visualization

(GPA: 3.92 / 4.0)

Goa University (Padre Conceição College of Engineering), Goa, India

Aug. 2007 - May 2011

B.E. Information Technology

EXPERIENCE

Research Assistant at VAI Lab, Stony Brook University, Stony Brook, NY

Sep. 2014 – Present

- Conducted research and published articles in the areas of visual analytics, data science, information visualization, and human-computer interaction.
- Developed multiple visualizations and visual analytics interfaces.

Research Intern at Akai Kaeru, Stony Brook, NY

Jun. 2020 – Aug. 2020

- Assisted in the design of a COVID-19 dashboard to visually explore risk factors in counties across the United States.
- -Assisted in the development of the COVID-19 dashboard.

Teaching Assistant at SUNY Korea, Incheon, S. Korea

Feb. 2013 – Jun. 2013

- Graded assignments for the Applied Calculus course (AMS 151).
- Assisted with conducting experiments for the Classical Physics Laboratory course (PHY 133)

PUBLICATIONS

Journal/Conference

- <u>D. Coelho</u>, B. Ghai, A. Krishna, S. Mankovskii, M. Velez-Rojas, S. Greenspan, K. Mueller, "TaskFinder: A Semantics-Based Methodology to Visualization Task Recommendations," *IEEE Transactions on Visualization and Computer Graphics* (In submission)
- J. Lee, <u>D. Coelho</u>, K. Mueller, "Scagnostics Glyphs: A Framework for Illustrating High-Dimensional Data Patterns in 2D Data Layouts," *IEEE Transactions on Visualization and Computer Graphics* (In submission)
- <u>D. Coelho</u>, K. Mueller, "Infomages: Embedding Data into Thematic Images," *Computer Graphics Forum*, 2020. [Best Paper Runner-Up Award at the EuroVis 2020]
- <u>D. Coelho</u>, R. Trailor, D. Sill, S. Engle, A. Joshi, S. Mankovskii, M. Velez-Rojas, S. Greenspan, K. Mueller, "Collaborative Visual Analytics Using Blockchain," *International Conference on Cooperative Design, Visualization and Engineering (CDVE)*, 2020
- <u>D. Coelho</u>, I. Chase, K. Mueller, "PeckVis: A Visual Analytics Tool to Analyze Dominance Hierarchies in Small Groups," *IEEE Transactions on Visualization and Computer Graphics*, 2020. [Best Paper Award at the Visual Data Science Symposium (VDS)]
- T. Im, <u>D. Coelho</u>, K. Mueller, P. De, "Smartphone Based Approximate Localization Using User Highlighted Texts from Images," *Pervasive and Mobile Computing*, 2018
- K.Jayachandran, S. Chilakamarri, <u>D. Coelho</u>, K. Mueller, "A Virtual Reality Grocery Shopping Game to Improve Awareness for Healthy Foods in Young Adults," *CEWIT: Emerging Technology for a Smarter World*, 2017

Q. Vo, D. Coelho, K. Mueller, P. De, "WhereAml: Energy Efficient Positioning using Partial Textual Signatures," IEEE International Conference on Mobile Services (MS), 2015

Workshops

- D. Coelho, Helen He, Maxim Baduk, K. Mueller, "Eating with a Conscience: Toward a Visual and Contextual Nutrition Facts Label," VisComm: Workshop on Visualization for Communication at IEEE VIS, 2020
- D. Coelho, K. Mueller, "Data Memes for Personal Visualization," Workshop on Personal Visualization: Exploring Data in Everyday Life, 2015
- D. Coelho, S. Lee, "Breast and Prostate Cancer Expression Similarity Analysis by Iterative SVM Based Ensemble Gene Selection," International Workshop on Data and Text Mining in Biomedical Informatics, 2013

Posters

- N. Hoque, D. Coelho, K. Mueller, "Examining the Visualization Practices of Data Scientists on Kaggle," *IEEE VIS*, 2019
- D. Zhang, D. Coelho, K. Mueller, "Google Glass for Personalized Augmentations of Data Visualizations," *IEEE VIS*, 2016
- D. Coelho, K. Mueller, "A Study of Sparse Detector Designs with Interpolation for Multi-Slice Spiral CT," IEEE Medical Imaging Conference, 2015
- D. Coelho, S. Ha, S. Cheng, S. Mahmood, J. Kim, K. Mueller, "MemViz: A Tool for Creating Memorable Visualizations," IEEE VIS, 2014

TECHNICAL

Programming

SKILLS

Python, Flask, JavaScript, HTML/CSS, ReactJS, D3.js, R, C/C++, Unity3D, Qt

Knowledge / Skills:

Data Visualization, Human-Computer Interaction, UI/UX, Statistics

AWARDS

Best Paper Runner-up Award at EuroVis 2020

May 2020

Best Paper Award at the Visual Data Science Symposium at IEEE VIS 2019

Oct. 2019

IT Consilience Creative Program Scholarship awarded by the Ministry of Science, Sep. 2013 - Aug. 2016 ICT and Future Planning (MSIP) South Korea

PROFESSIONAL Journal/External Reviewer

SERVICE

IEEE TVCG 2019-Present **IEEE VIS** 2019-Present 2020-Present EuroVis

ACM TiiS

2021-Present

STUDENTS MENTORED

Adnan Vasanwalla (MS), Mayank Tiwari (MS), Jyoti Singh (MS), Venkata Bhaskaram Varanasi (MS), Gaganraj Maheshwari (MS), Chaitra Hegde (MS), Deepankar Singla(MS), Vibhor Shukla (MS), Shikha Dixit (MS), Bhavarth Chauhan (MS), Tarun Jindal (MS)

Helen He (HS)

Eesha Gothwal(MS), Sarang Pande(MS), Maxim Baduk (HS)

2018 2017

2020