# Darius Coelho

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#### EDUCATION

#### Stony Brook University, Stony Brook, NY

09.11.2012 - 05.20.2021

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

Thesis: Methodologies to Enable General Participation in Data Visualization

(GPA: 3.92 / 4.0)

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

08.06.2012 - 05.30.2021

B.E. Information Technology

# **EXPERIENCE**

# Chief Software Architect at Akai Kaeru, Stony Brook, NY

06.01.2021 - Present

- Design and develop visual analytics systems for explainable Al.

Research Assistant Professor - Visiting at Stony Brook University, Stony Brook, NY

09.01.2021 - Present

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

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

09.01.2014 - 05.20.2021

- 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

06.03.2020 - 08.15.2020

- 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

02.10.2013 - 06.14.2013

- 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)
- I. Chase, <u>D. Coelho</u>, W. Lee, K. Mueller, J. Curely, "Networks Never Rest: An Investigation of Network Evolution in Three Species of Animals," *Social Networks*, 2022
- J. Lee, <u>D. Coelho</u>, K. Mueller, "Scagnostics Glyphs: A Framework for Illustrating High-Dimensional Data Patterns in 2D Data Layouts," *Information*, 2022
- <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 2019 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, <u>D. Coelho</u>, K. Mueller, P. De, "WhereAml: Energy Efficient Positioning using Partial Textual Signatures," *IEEE International Conference on Mobile Services (MS)*, 2015

# Workshops

- <u>D. Coelho</u>, 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
- <u>D. Coelho</u>, K. Mueller, "Data Memes for Personal Visualization," *Workshop on Personal Visualization: Exploring Data in Everyday Life*, 2015
- <u>D. Coelho</u>, 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, <u>D. Coelho</u>, K. Mueller, "Examining the Visualization Practices of Data Scientists on Kaggle," *IEEE VIS*, 2019
- D. Zhang, <u>D. Coelho</u>, K. Mueller, "Google Glass for Personalized Augmentations of Data Visualizations," *IEEE VIS*, 2016
- <u>D. Coelho</u>, K. Mueller, "A Study of Sparse Detector Designs with Interpolation for Multi-Slice Spiral CT," *IEEE Medical Imaging Conference*, 2015
- <u>D. Coelho</u>, 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

05.25.2020

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

10.20.2019

IT Consilience Creative Program Scholarship awarded by the Ministry of

09.11.2013 - 08.24.2016

Science, ICT and Future Planning (MSIP) South Korea

# PROFESSIONAL Journal/External Reviewer

**SERVICE** IEEE TVCG

2019-Present 2019-Present 2020-Present 2021-Present

EuroVis ACM TiiS

**IEEE VIS** 

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)	2020
	Helen He (HS)	2018
	Eesha Gothwal(MS), Sarang Pande(MS), Maxim Baduk (HS)	2017

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WEB PROFILES scholar.google.com/citations?user= NsAMDAAAAAJ&hl=en
linkedin.com/in/darius-coelho-241534aa/