Arjun Srinivasan

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SUMMARY

I am a fourth year Ph.D. student pursuing Computer Science at Georgia Tech. As part of my research, I design intelligent and expressive tools that combine multimodal input (e.g. speech and touch) and mixed-initiative interface techniques for human-data interaction through visualizations.

EDUCATION

Georgia Institute of Technology, Atlanta, Georgia, USA

■ Ph.D. in Computer Science

Aug 2016 – Present

Research areas: Human-Computer Interaction, Information Visualization

Advisor: Dr. John Stasko

■ M.S. in Computer Science

Aug 2014 - May 2016

Specialization: Visual Analytics Cumulative GPA: 3.83 / 4.0

R.V. College of Engineering, Bangalore, Karnataka, India

■ B.E. in Information Science Cumulative GPA: 8.68 / 10.00 Aug 2009 - Jun 2013

EXPERIENCE

Microsoft Research, Redmond, Washington, USA

Research Intern, Mentor: Dr. Bongshin Lee

May 2019 - Aug 2019

Developed multimodal interfaces for data visualization with the EPIC (Extended Perception, Interaction & Cognition) Research Group.

Adobe Research, Seattle, Washington, USA

Research Intern, Mentor: Dr. Mira Dontcheva

May 2018 - Aug 2018

Explored user interface techniques to enhance discoverability of speech input in multimodal interfaces.

Microsoft Research, Redmond, Washington, USA

Research Intern, Mentor: Dr. Steven Drucker

May 2017 - Aug 2017

Designed and evaluated techniques to facilitate visual comparison in data visualization dashboards.

Salesforce.com, San Francisco, California, USA

Software Engineering Intern, Analytics Cloud

May 2015 – Aug 2015, May 2016 – Aug 2016

Developed a visualization system for real-time monitoring and diagnosis of service queues across data centers in a multi-tenant cloud architecture.

SAP Labs India, Bangalore, Karnataka, India

Associate Developer, SAP HANA Cloud Integration

Jul 2013 – Apr 2014

Worked on R&D of Business Process Integration solutions on the cloud. Focused on developing proof of concept solutions for database refactoring and database migration.

PUBLICATIONS

JOURNAL/ CONFERENCE

A. Srinivasan, S.M. Drucker, A. Endert, and J. Stasko. "Augmenting Visualizations with Interactive Data Facts to Facilitate Interpretation and Communication." *IEEE Transactions on Visualization and Computer Graphics*, 2019.

<u>A. Srinivasan</u>, M. Dontcheva, E. Adar, and S. Walker. "Discovering Natural Langauge Commands in Multimodal Interfaces." *ACM Conference on Intelligent User Interfaces (IUI)*, 2019.

<u>A. Srinivasan</u> and J. Stasko. "Orko: Facilitating Multimodal Interaction for Visual Exploration and Analysis of Networks." *IEEE Transactions on Visualization and Computer Graphics*, 2018.

<u>A. Srinivasan</u> and J. Stasko, "Natural Language Interfaces for Data Analysis with Visualization: Considering What Has and Could Be Asked", *Proceedings of EuroVis*, 2017.

- A. Srinivasan, H. Park, A. Endert, and R. Basole. "Graphiti: Interactive Specification of Attribute-based Edges for Network Modeling and Visualization." *IEEE Transactions on Visualization and Computer Graphics*, 2018.
- A. Srinivasan, M. Brehmer, B. Lee and S. Drucker. "What's the Difference?: Evaluating Variants of Multi-Series Bar Charts for Visual Comparison Tasks." *ACM Conference on Human Factors in Computing Systems (CHI)*, 2018.
- F. Hohman*, <u>A. Srinivasan</u>*, S.M. Drucker. "TeleGam: Combining Visualization and Verbalization for Interpretable Machine Learning." *IEEE Visualization Conference (VIS) Short Papers*, 2019. *equal contribution.
- M. Agarwal, <u>A. Srinivasan</u>, J. Stasko. "VisWall: Visual Data Exploration Using Direct Combination on Large Touch Displays." *IEEE Visualization Conference (VIS) Short Papers*, 2019.
- B. Lee, <u>A. Srinivasan</u>, J. Stasko, M. Tory, and V. Setlur. "Multimodal Interaction for Data Visualization." *Workshop at the International Conference on Advanced Visual Interfaces (AVI)*, 2018.
- J. Thompson, <u>A. Srinivasan</u>, and J. Stasko. "Tangraphe: Interactive Exploration of Network Visualizations using Single Hand, Multi-touch Gestures." *International Conference on Advanced Visual Interfaces (AVI) Short Papers*, 2018.
- R. Basole, <u>A. Srinivasan</u>, H. Park, and S. Patel. "ecoxight: Discovery, Exploration and Analysis of Business Ecosystems using Interactive Visualization." *ACM Transactions on Management Information Systems (TMIS)*, 2018
- B. Saket, <u>A. Srinivasan</u>, E. Ragan, and A. Endert, "Evaluating Interactive Graphical Encodings for Data Visualization", *IEEE Transactions on Visualization and Computer Graphics*, 2017.
- R. Basole, T. Major, and <u>A. Srinivasan</u> "Understanding Alliance Portfolios using Visual Analytics", *ACM Transactions on Management Information Systems*, *Vol. 8*, *No. 2*, *Article 1*, 2017.

WORKSHOPS

- A. Srinivasan, B. Lee, and J. Stasko. "Facilitating Spreadsheet Manipulation on Mobile Devices Leveraging Speech", *Data Visualization on Mobile Devices workshop at CHI 2018*, 2018."
- SB. Karthik, <u>A. Srinivasan</u>, N. Elmqvist, and J. Stasko. "Affordances of Input Modalities for Visual Data Exploration in Immersive Environments", *IEEE VIS Workshop on Immersive Analytics*, 2017."
- R. Basole, T. Major, and <u>A. Srinivasan</u>, "Sequencing the Enterprise Genome: Interactive Visual Analysis of Multi-Dimensional Alliance Activities of Global Enterprises.", *IEEE VIS business*|vis, 2015.

POSTERS

A. Das, <u>A. Srinivasan</u>, and J. Stasko, "CricVis: Interactive Visual Exploration and Analysis of Cricket Matches", *IEEE VIS*, 2017.

A. Srinivasan, and J. Stasko, "NL4DV: Toolkit for Natural Language Driven Data Visualization", *IEEE VIS*, 2016.

TECHNICAL SKILLS

Programming Languages

Most experienced with: JavaScript, Python, HTML/CSS, Java, SQL

Familiar with: Node.js, R, C#, C++ Dabbled in: C, PHP, Perl, Processing

Libraries/Frameworks

d3.js, numpy, NLTK, scipy, jQuery, Flask, Express

ACHIEVEMENTS / AWARDS	Georgia Tech College of Computing "Outstanding Graduate Research Assistant" Award Winner of Salesforce.com's Analytics Innovation Challenge. National finalist of Walmart's Collegiate Innovators Challenge. SAP Global Peer Recognition award. Winner (1 st place) of SAP Osmosis. National finalist (1 st runner-up) of SAP BizTech. Winner of Microsoft India's Windows 8 hackathon. National finalist of SAP Dashboard Design Challenge.	. 2018 2016 2014 2013 2013 2012 2012 2011
ACADEMIC SERVICE	Awarded Special Recognition for Outstanding Reviews EuroVis 2019, MobileHCI 2019 Organization Committee AVI 2018 Workshop on Multimodal Interaction For Data Visualization Program Committee 2nd Workshop on Visualization for AI Explainability (VISxAI) at IEEE VIS 2019 KDD 2018 Workshop on Interactive Data Exploration and Analytics (IDEA) Reviewer IEEE VIS, ACM CHI, ACM UIST, ACM ISS, EuroVis, MobileHCI, ACM ICMI, IEEE CG&A, INTERACT Teaching Assistant	2016-Present
	CS7450 Information Visualization CS8803 Data Visualization: Principles & Applications	Fall 2018 Spring 2017
LEADERSHIP/ TECHNICAL EVANGELISM	Board Member, India Club at Georgia Tech Salesforce.com Campus Brand Ambassador Georgia Tech Career Fair Liason SAP Student Ambassador (1 st student selected globally) Member of the Microsoft India App Review Board Microsoft Student Partner Joint Secretary for the Rotaract Club of RVCE	2017 2016-2017 2014 2013-2015 2013-2014 2011-2013 2011-2012