# Arjun Srinivasan

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**SUMMARY**

I am a 4<sup>th</sup> year Computer Science Ph.D. student at Georgia Tech seeking full-time positions starting Summer/Fall 2020. My current research is at the intersection of Human-Computer Interaction and Information Visualization. Specifically, drawing upon techniques from multimodal (e.g. speech and touch) and mixed-initiative interaction, I design intelligent and expressive tools for visual data analysis.

**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 — Aug 2009 – Jun 2013
  Cumulative GPA: 8.68 / 10.00

**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, B. Lee, N.H. Riche, S.M. Drucker, and K. Hinckley. "InChorus: Designing Consistent Multimodal Interactions for Data Visualization on Tablet Devices." *ACM Conference on Human Factors in Computing Systems (CHI)*, 2020 (To Appear).

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.

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

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

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.M. 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.

A. Srinivasan and J. Stasko, "Natural Language Interfaces for Data Analysis with Visualization: Considering What Has and Could Be Asked", *Proceedings of EuroVis (Short Papers)*, 2017.

F. Hohman*, A. Srinivasan*, S.M. Drucker. "TeleGam: Combining Visualization and Verbalization for Interpretable Machine Learning." *IEEE Visualization Conference (VIS) Short Papers*, 2019. *equal contribution.

A. Saktheeswaran, A. Srinivasan, J. Stasko. "Touch? Talk? or Touch and Talk? Investigating Multimodal Interaction for Visual Network Exploration and Analysis." *IEEE Transactions on Visualization and Computer Graphics*, 2020. (To Appear)

M. Agarwal, A. Srinivasan, J. Stasko. "VisWall: Visual Data Exploration Using Direct Combination on Large Touch Displays." *IEEE Visualization Conference (VIS) Short Papers*, 2019.

B. Lee, A. Srinivasan, 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, A. Srinivasan, 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, A. Srinivasan, 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, A. Srinivasan, 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 A. Srinivasan "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, A. Srinivasan, 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 A. Srinivasan, "Sequencing the Enterprise Genome: Interactive Visual Analysis of Multi-Dimensional Alliance Activities of Global Enterprises.", *IEEE VIS business|vis*, 2015.

**POSTERS**

A. Das, A. Srinivasan, 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.

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| **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 | |

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| **ACHIEVEMENTS / AWARDS** | Georgia Tech College of Computing "Outstanding Graduate Research Assistant" Award. | 2018 |
| | Winner of Salesforce.com's Analytics Innovation Challenge. | 2016 |
| | National finalist of Walmart's Collegiate Innovators Challenge. | 2014 |
| | SAP Global Peer Recognition award. | 2013 |
| | Winner of SAP Osmosis. | 2013 |
| | National finalist (1st runner-up) of SAP BizTech India. | 2012 |
| | Winner of Microsoft India's Windows 8 hackathon. | 2012 |
| | National finalist of SAP Dashboard Design Challenge India. | 2011 |

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| **ACADEMIC SERVICE** | **Organization Committee** | |
| | AVI Workshop on Multimodal Interaction For Data Visualization | 2018 |
| | **Program Committee** | |
| | ACM Intelligent User Interfaces Conference (Posters and Demos) | 2020 |
| | 2nd Workshop on Visualization for AI Explainability (VISxAI) at IEEE VIS | 2019 |
| | KDD Workshop on Interactive Data Exploration and Analytics (IDEA) | 2018 |
| | **Reviewer** | 2016-Present |
| | IEEE VIS, ACM CHI, ACM UIST, ACM ISS, EuroVis, MobileHCI, ACM ICMI, ACM IUI, IEEE TVCG, IEEE CG&A, INTERACT | |
| | **Awarded Special Recognition for Outstanding Reviews** | |
| | EuroVis 2019, MobileHCI 2019 | |
| | **Teaching Assistant** | |
| | CS7450 Information Visualization | Fall 2018 |
| | CS8803 Data Visualization: Principles & Applications | Spring 2017 |

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| **STUDENTS MENTORED** | **Arpit Narechania**, Ph.D., CS (Currently at Georgia Tech) | Fall 2019 – Present |
| | **Shrishti AK**, Masters, CS (Currently at Georgia Tech) | Spring 2020 – Present |
| | **Rishab Mitra**, Undergraduate, CS (Currently at Georgia Tech) | Spring 2020 – Present |
| | **Hayeong Song**, Ph.D., CS (Currently at Georgia Tech) | Fall 2018 – Fall 2019 |
| | **Kuhu Gupta**, Masters, CS (Currently at Georgia Tech) | Fall 2018 |
| | **Ayshwarya Saktheeswaran**, Masters, HCI (Now at MathWorks) | Fall 2017 – Spring 2018 |
| | **Ayan Das**, Undergraduate + Masters, CS (Now at KPMG) | Spring 2017 – Fall 2018 |
| | **Hyemin Hwang**, Masters, CS (Now at Amazon) | Fall 2017 – Summer 2018 |
| | **George Wang**, Undergraduate, CS (Now at Google) | Fall 2017 – Spring 2018 |
| | **Mallika Agarwal**, Masters, CS (Now at Uber) | Fall 2017 |

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| **LEADERSHIP/ TECHNICAL EVANGELISM** | Board Member, India Club at Georgia Tech | 2017 |
| | Salesforce.com Campus Brand Ambassador | 2016-2017 |
| | Georgia Tech Career Fair Liason | 2014 |
| | SAP Student Ambassador (1st student selected globally) | 2013-2015 |
| | Member of the Microsoft India App Review Board | 2013-2014 |
| | Microsoft Student Partner | 2011-2013 |
| | Joint Secretary for the Rotaract Club of RVCE | 2011-2012 |