AJIT JAIN

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Investigating novel means for supporting design learning and creativity through a human-centered AI approach.

EDUCATION

- **Ph.D**., Computer Science, Texas A&M University   GPA: 4.00 / 4.00   Dec 2020 (Expected)
  Co-Advsiors: Dr. Andruid Kerne and Dr. Ruihong Huang

- **M.S.**, Computer Science, Texas A&M University   GPA: 3.77 / 4.00   Dec 2014
  Advisor: Dr. Andruid Kerne   *Thesis*: TweetBubble: A Twitter Extension Stimulates Exploratory Browsing

- **B.E.**, Information Technology, Delhi College of Engineering   2003-2007

- *Graduate Coursework*: Human-Centered Computing, AI, Machine Learning, Natural Language Processing, Information Retrieval, Physically-Based Modeling, Qualitative Methods, Cognitive Processes, Algorithms, Design using C++.

RESEARCH PROJECTS

- DesignAnalysis, Interface Ecology Lab   Team Size: 5   Spring 2017 -
  A human-centered AI investigation for assisting instructors in assessment of visual and conceptual aspects of design.

- EventIndicators, Texas A&M NLP Lab   Team Size: 3   Spring 2016 - Fall 2016
  A weakly supervised approach for extracting and clustering event indicators from Twitter social media.

- TweetBubble, Interface Ecology Lab   Team Size: 5   Fall 2013 - Fall 2016
  A Chrome Extension for Twitter users to follow @usernames, #hashtags associations without tabs or windows.

- BigSemantics, Interface Ecology Lab   Team Size: 5   Fall 2012 - Fall 2016
  A software architecture for developing Meta-Metadata web semantics powered dynamic exploratory browsing interfaces.

- PhotoNav, Interface Ecology Lab   Team Size: 3   Fall 2011 - Spring 2012
  A wearable computing investigation for assisting pedestrian navigation through the means of photographs and directions.

- EvolutionWorks, Human Centered Computing   Team Size: 3   Fall 2011 - Spring 2012
  An interactive exploration space for research papers interconnections facilitating browsing, collection and sensemaking.

PUBLICATIONS

- Britain, G., **Jain, A.**, Lupfer, N., Kerne, A., Perrine, A., Seo, J., Sungkajun, A. Design is (A)live: An Environment Integrating Ideation and Assessment, *Proc. ACM CHI 2020 Late-Breaking Work*, 1-8 [41.8%].

- **Jain, A.** Measuring Creativity: Multi-Scale Visual and Conceptual Design Analysis. *Proc. ACM Creativity & Cognition (C&C) 2017*, Graduate Student Symposium, Singapore, 490-495.

- Kerne, A., Lupfer, N., Linder, R., Qu, Y., Valdez, A., **Jain, A.**, Keith, K., Carrasco, M. and others. Free-form Web Curation: Strategies for Creative Engagement with Prior Work. *Proc. ACM Creativity & Cognition (C&C) 2017*, 380-392 [29%].

- **Jain, A.**, Kasiviswanathan, G., Huang, R. Towards Accurate Event Detection in Social Media: A Weakly Supervised Approach for Learning Implicit Event Indicators. *Proc. Computational Linguistics (COLING) 2016 WNUT Workshop*.

- Sharma, H. N., Toups, Z. O., Dolgov, I., Kerne, A., **Jain, A.** Evaluating Display Modalities using a Mixed Reality Game. *Proc. ACM Annual Symposium on Computer-Human Interaction in Play (CHI PLAY) 2016*, 65-77 [29%].

- **Jain, A.**, Lupfer, N., Qu, Y., Linder, R., Kerne, A., Smith, S. M. Evaluating TweetBubble with Ideation Metrics of Exploratory Browsing. *Proc. ACM Creativity and Cognition Conference (C&C) 2015*, 178-187 [28%].
  Best Paper Honorable Mention - Top 2%.

- Wilkins, J., Järvi, J., **Jain, A.**, Kerne, A., Kejriwal, G., Gumudavelly, V. EvolutionWorks: Towards Improved Visualization of Citation Networks. *Proc. IFIP Conference on Computer-Human Interaction (INTERACT) 2015*, 213-230 [29.9%].

- Sharma, H. N., Toups, Z. O., **Jain, A.**, Kerne, A. Designing to Split Attention in a Mixed Reality Game. *Proc. ACM Annual Symposium on Computer-Human Interaction in Play (CHI PLAY) 2015*, 691-696 [70%] (Work-in-Progress).

- Qu, Y., Kerne, A., Lupfer, N., Linder, R., **Jain, A.** Metadata Type System: Integrate Presentation, Data Models and Extraction to Enable Exploratory Browsing Interfaces. *Proc. ACM Engineering Interactive Computing Systems (EICS) 2014*, 107-116 [18%].

- Fei, S., Webb, A. M., Kerne, A., Qu, Y., and **Jain, A.** Peripheral Array of Tangible NFC Tags: Positioning Portals for Embodied Trans-Surface Interaction. *Proc. ACM Interactive Tabletops and Surfaces (ITS) 2013*, 33-36 [29%].

- **Jain, A.** and Singh, S. Modified Programming Language Framework for IVRS Accessibility of Graphical User Interfaces. U-Media, pp.163-167, *Proc. IEEE Ubi-Media Computing (U-Media) 2011*, 163-167 [34%].

WORK EXPERIENCE

- *Summer Intern,* **CWI**, Amsterdam, Netherlands   *Mentor*: Dr. Pablo Cesar   Jun-Aug 2018
  Gather needs and evaluate visualizations for sensemaking of sleep data provided to end-users by personal trackers.

- *Summer Intern,* **Adobe Research**, San Jose, CA, USA   *Mentor*: Dr. Eunyee Koh   Jun-Aug 2017
  Investigate interactive visualization of large-scale graph data toward supporting marketers in audience segmentation.

- *Summer Intern,* **Google**, Mountain View, CA, USA   *Mentor*: Amos Yoffe   Jun-Aug 2016
  Present message results in Android In Apps Search clustered by topic and/or time. Launched in September 2016.

- *Summer Intern*, **Google Summer of Code** at Interface Ecology Lab, Texas A&M University   Jun-Aug 2012
  Create RESTful BigSemanticsService for *Meta-Metadata* structured web semantics represented in XML / JSON format.

- *Teaching Assistant*, **Dept. of Computer Science and Engineering**, Texas A&M University

    CSCE655 Human-Centered Computing, Fall 2016.
    CSCE444 Structures of Interactive Information, Fall 2015.
    CSCE482 Senior Capstone Design, Fall 2017.
    CSCE315 Programming Studio, Spring 2020, Fall & Spring 2019, Fall & Spring 2018, Spring 2017, Fall 2016.
    CSCE121 Introduction to Program Design and Concepts (C++), Summer 2020, Summer & Spring 2015.
    CSCE206 Structured Programming (C++), Spring 2016.

- *Software Engineer / Commercialization Coordinator*   Team Size: 20   Jul 2007-Aug 2011
  Samsung India Software Centre, Noida, India and **Media Software Platform Lab,** Suwon, S. Korea

  Coordinate commercialization of Java platform for mobile, set-top, and blu-ray product lines, spanning teams in India and S. Korea. Develop, port, and optimize 2D Graphics sub-module of JVM. Incorporate multithreaded MNG animation support.

COMPUTING SKILLS

Programming Languages	:	C, C++, JAVA, Python, R
Web Programming	:	HTML, JavaScript, REST, Node.js
Libraries / Toolkits	:	D3.js, Three.js, PhantomJS, Gephi

AWARDS & ACHIEVEMENTS

- **Best Paper Honorable Mention** at ACM Creativity and Cognition 2015.

- **Best Teaching Assistant Nomination** for 2018-2019 and 2019-2020.

- **Outstanding Reviewer** recognition for CHI PLAY 2019 Full Papers.

- **Best Attitude** (2008) & **Extra Mile** (2010) Awards at Samsung.

- **Six Sigma Green Belt Certification** for project titled 'To Improve Remote Desktop Response Time' at Samsung.

SERVICE

- Review publications at reputed computing and creativity conferences and journals.

ACM CHI	:	2020, 2019, 2017, 2016
ACM DIS	:	2020, 2019, 2018, 2016
ACM CHI PLAY	:	2019, 2018, 2017
ACM CSCW	:	2020, 2018
ACM C&C	:	2019, 2015
Psychonomic Bullein	:	2019

- Registration Chair for ACM SIGCHI Creativity and Cognition (C&C) 2019.

MENTORING

- Advise undergraduate students on thesis proposal and paper writing, software implementation, and/or data analysis.

Gabriel Britain	:	Fall 2019 - Spring 2020 (Engineering Honors - Thesis Track)
Hannah Fowler	:	Spring 2018 - Fall 2018 (CRA Outstanding Undergraduate Researcher)
Aaron Perrine	:	Spring 2018 - Fall 2018 (Engineering Honors - Thesis Track)
Alex Stacy	:	Fall 2016