RHEMA LINDER

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EDUCATION *PhD Student in Computer Science* at Texas A&M University, 2013-December 2017
Bachelor of Science, Computer Science and Mathematics LeTourneau University 2005-2009

Graduate Courses: Human Centered Computing, Computer-Supported Cooperative Work, Information Retrieval, Interactive Performance and Technology, Creative Cognition, Qualitative Methods, Digital Research Methods

RESEARCH *Interface Ecology Lab (ecologylab.net)*, Summer 2010 to Present
Rhema Linder is a PhD candidate in the Interface Ecology Lab at Texas A&M University. His research interests are human-centered computing in popular media and education, supporting and analyzing practices of creativity. His dissertation research involves creating tools for visualizing and analyzing the more than 20,000 hours of use of IdeaMÂCHÉ (`http://ideamache.ecologylab.net`), a cloud based platform for collecting, organizing, and sharing text, pictures, and links gathered from the Web.

I am an active reviewer. Over the last three years, I have reviewed a more than 50 papers for the following conferences: CHI, CHI Play, CSCW, DIS, CSCW, CHI Extended Abstracts, EICS, and ACM Creativity and Cognition.

PUBLICATIONS

Kerne, A., Lupfer, N., Linder, R., Qu, Y., Valdez, A., Jain, A., Keith, K., Carrasco, M., Vanegas, J., and Bilingsley, A. Strategies of free-form web curation: Processes of creative engagement with prior work. In *(to appear) Proceedings of the 2017 ACM SIGCHI Conference on Creativity and Cognition*, ACM (2017) [29%]

Koh, E., and Linder, R. Visitor identification based on feature selection, Feb. 16 2017. US Patent App. 14/823,121

Lupfer, N., Kerne, A., Webb, A. M., and Linder, R. Patterns of free-form curation: Visual thinking with web content. In *Proceedings of the 2016 ACM SIGCHI Conference on Multimedia*, ACM (2016), In press

Webb, A., Kerne, A., Linder, R., Lupfer, N., Qu, Y., Keith, K., Carrasco, M., and Chen, Y. A free-form medium for curating the digital. In *Curating the Digital Space for Art and Interaction*, Springer (2016, doi:10.1007/978-3-319-28722-5)

Jain, A., Lupfer, N., Qu, Y., Linder, R., Kerne, A., and Smith, S. M. Evaluating tweetbubble with ideation metrics of exploratory browsing. In *Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition*, ACM (2015), 53–62 [28% best paper nomination]

Linder, R., Lupfer, N., Kerne, A., Webb, A. M., Hill, C., Qu, Y., Keith, K., Carrasco, M., and Kellogg, E. Beyond slideware: How a free-form presentation medium stimulates free-form thinking in the classroom. In *Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition*, ACM (2015), 285–294

Lupfer, N., Hamilton, B., Webb, A., Linder, R., Edmonds, E., and Kerne, A. The art.chi gallery: An embodied iterative curation experience. In *Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '15, ACM (New York, NY, USA, 2015), 391–394

Linder, R., Snodgrass, C., and Kerne, A. Everyday ideation: All of my ideas are on pinterest. In *Proc. CHI* (2014)[23%] Linder, R., Snodgrass, C., and Kerne, A. Everyday ideation: All of my ideas are on pinterest. In *Proceedings of the 32Nd Annual ACM Conference on Human Factors in Computing Systems*, CHI '14, ACM (New York, NY, USA, 2014), 2411–2420 [23%]

Kerne, A., Webb, A. M., Smith, S. M., Linder, R., Lupfer, N., Qu, Y., Moeller, J., and Damaraju, S. Using metrics of curation to evaluate information-based ideation. *ACM Trans. Comput.-Hum. Interact. 21*, 3 (June 2014), 14:1–14:48

Qu, Y., Kerne, A., Lupfer, N., Linder, R., and Jain, A. Metadata type system: Integrate presentation, data models and extraction to enable exploratory browsing interfaces. In *Proc ACM EICS* (2014) Qu, Y., Kerne, A., Lupfer, N., Linder, R., and Jain, A. Metadata type system: Integrate presentation, data models and extraction to enable exploratory browsing interfaces. In *Proceedings of the 2014 ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, EICS '14, ACM (New York, NY, USA, 2014), 107–116 Webb, A. M., Linder, R., Kerne, A., Lupfer, N., Qu, Y., Poffenberger, B., and Revia, C. Promoting reflection and interpretation in education: Curating rich bookmarks as information composition. In *Proceedings of the 9th ACM Conference on Creativity&Cognition*, C&C '13, ACM (New York, NY, USA, 2013), 53–62 [32%]

WORKSHOPS / PRESENTATIONS

Linder, R. Visual analytics for understanding a user's creative processes. In *Visual Analytics Science and Technology (VAST) Doctoral Colloquium, 2016 IEEE Conference on*, IEEE (2016)

Linder, R., Pena, A. M., Jayarathna, S., and Ragan, E. D. Automatically generating visual summaries of provenance with interaction history and topic modeling. In *Visual Analytics Science and Technology (VAST), 2016 IEEE Conference on*, IEEE (2016)

Linder, R., Webb, A., and Kerne, A. Searching to measure the novelty of collected ideas. In *CHI'13 Workshop: Evaluation Methods for Creativity Support Environments* (2013)[36%]

Linder, R., and Kerne, A. Crowdpowered ideas and plans: Everyday productivity on pinterest. In *CHI'16 Workshop, Productivity Decomposed: Getting Big Things Done with Little Microtasks* (2016)

Webb, A. M., Kerne, A., Linder, R., Lupfer, N., Qu, Y., Keith, K., and Carrasco, M. Multi-scale information composition: a new medium for freeform art curation in the cloud. In *CHI'14 Workshop: Curating the Digital: Spaces for Art and Interaction* (2014)

Webb, A., Linder, R., and Kerne, A. Promoting reflection and interpretation in education: Curating rich bookmarks as information composition. In *In Proc. Creativity and Cognition '13* (2013)[32%]

Linder, R., and Kerne, A. Using information composition to represent connections among events across time and place. In *CHI'12 Workshop: Heritage Matters: Designing for Current and Future Values Through Digital and Social Technologies* (2012)

SOFTWARE DEVELOPMENT SKILLS

Programming: C++, C#, Objective C, CSS, HTML, Javascript, Java, Python, PHP, R, SQL, JSON, XML

Frameworks: Hadoop, Apache Spark, Keras, Node.js, Django, boto, d3, jQuery, Processing

Server/Database: AWS EC2/EMR/S3, Postgresql, MongoDB, CouchDB, Unix Administration, KVM, BASH scripts

Software: Git, SVN, Visual Studio, Eclipse, vim, Windows, Unix, Linux, OSX, Adobe, LaTeX

INTERNSHIPS AND WORK EXPERIENCE

- Microsoft Research Seattle, Summer 2015 and Summer 2016
  - Internship resulted in ongoing article submissions.
  - Worked Jaime Teevan, Shamsi Iqbal, and other on crowdsourcing for writing. Created research software.

- – Performed user studies and interviews with scholars, and large crowdsourced study.
- Eric Ragan Collaboration, Spring 2016
  - – Worked with Eric Ragan on automatic provenance generation visualization.
  - – Used topic modeling, ran a study, wrote scholarly copy
  - – Resulted in workshop presentation in IEEE Vast 2016, and later extended submission to IEEE TVCG
- Adobe Data Science Research, Summer 2014 (Part-Time Until Summer 2015)
  - – Internship resulted a US Patent Application (14/823,121) and CHI Extended Abstract publication.
  - – Worked with Eunyee Koh.
  - – Worked as Data Scientist specializing in HCI. Research projects involved manipulating, visualizing, and benchmarking big data.
  - – Utilized big data technologies such as HDFS, Spark, Elasticsearch, and R.
  - – Performed user study and interviews with data scientists.
- Computing Services Group at TAMU, Summer 2011-Summer 2012
  - – Responsible for developing networking, inventory, and blackboard infrastructure for the Texas A&M Computer Science Department. Wrote PHP for network and asset management, including a script for tracking computers and VMs connected to the network via VMPS.

TEACHING EXPERIENCE

- Teaching Assistant, Texas A&M University 2009-2010, 2014, 2015-2017:
  - – Graded homework, led labs, and occasionally lectured in Human Centered Computing, C++, and Java courses
- Teacher, Supplementary Homeschool Courses 2012-2014:
  - – Taught computer and programming courses to students in 8th-12th grade: General Computing, Programming Fundamentals With Python, Design Play With Scratch

GRADUATE COURSE AND OTHER PROJECTS

- Blue Link City, 2016
  Interactive Virtual Reality experience that shows content from Reddit in a cityscape. Used big data and visualization techniques to spatialize communities and Reddit's API to incorporate live social media content.
- Doorway to the Soul, 2015+2017
  Interactive art collaboration with Jamie Zigelbaum and Jimmy Tran at Midnight Commercial `jamiezigelbaum.com/doorway-to-the-soul/`. A sculpture with mounted screen displays near-realtime footage of crowdsourced participants at their webcams. *"Two people, standing face to face, looking each other in the eyes. Today one has to ask: can they see me?"*.
- Interactive Performance Collaboration, Spring 2013
  Collaborated with artists and Computer Scientists to create an interactive dance performance that sensed audience activity.
- The Frog, an iPad App for Young Toddlers, 2012
  Designed, developed and launched iPad application / toy for toddlers with 500 downloads. A modeless design avoids menu and setup actions. Small toddlers can either tap or drag across the screen to see a frog's tongue reach out then retract as it contacts a cartoon bug.
- `tpoem.com` Web app environment for writing poems and songs, Fall 2010
  (live at tpoem.com, users' poems at `tpoem.com/poems`) Javascript/HTML/Django app for writing poetry and songs, includes calm rhyme and synonym suggestions and user publication.