Curriculum Vitae

Rhema Linder

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Current Position and Education

- *Doctor of Philosophy* in Computer Science Texas A&M University, May 2019.
- *Bachelor of Science* in Computer Science and Mathematics Le-Tourneau University, May 2009.

I am currently working as a *Postdoctoral Researcher* with Alex Williams and Austin Henley at the University of Tennessee, Knoxville.

Research and Experience

My work investigates software systems for managing information spaces for creative productivity in networks of human and AI and systems. I build systems for productivity, well-being, visualization, and analysis. My research focus is in Human-Computer Interaction with an emphasis on sociotechnical and cognitive aspects that impact productivity. I have <u>publications and experience</u> in a number of academic and industry research labs where I executed a wide range of methods, such as interviews, experimental design, software logging, and research prototypes.

PAIRS Lab - Oct 2020 to Present

I am working with Alex Williams and Austin Henley in the <u>PAIRS Lab</u> as a Postdoctoral Researcher at the University of Tennessee, Knoxville on work-life balance projects, crowdsourcing for mobile, and innovative applications for productivity and well-being. Thus far, this had led to a GROUP 2022 publication [1] and CHI [2], CSCW [3] workshop presentation, and accepted CHI paper [4].

Research and Development Consulting - May 2019 to Present

While the majority of my this work was performed from May 2019 to Oct 2020, I continue outside consulting on a limited basis. This work includes a combination of tutoring, software development, data analysis, search architecture (Elasticsearch), visualization (d3.js), and research design.

Interface Ecology Lab - Summer 2010 to Spring 2019

The Interface Ecology Lab is led by Andruid Kerne at Texas A&M University, my dissertation advisor. Our publications [5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16] and presentations [17, 18, 19, 20] focus on understanding and promoting creativity in support of education and design. My dissertation involves a multi-year project [21, 22] building a system that supported investigators in understanding log data by integrating social science methods, information visualization, and algorithms.

Indie Lab - Spring 2016 to Spring 2019

I worked with Eric Ragan in the <u>Indie Lab</u>, on automatic provenance visualizations [23] and developed Mechanical Turk studies for DARPA funded Explainable AI for fact checking tasks [24, 25].

Microsoft Research Seattle - Summer 2015 and Summer 2016

Internships resulted in one published [26] and one ongoing paper. In both, worked with Jaime Teevan, Shamsi Iqbal, and others on crowdsourcing for writing. I created research software and performed interviews with scholars and large crowdsourced studies.

Adobe Research San Jose - Summer 2014 to Spring 2015

I worked with Eunyee Koh as a Data Science Intern specializing in HCI. Research projects involved manipulating, visualizing, and benchmarking big data with Spark, Elasticsearch, and R. My internship was extended to part time work and generated a US Patent [27] and CHI Extended Abstract publication [28].

Service

I am an active reviewer among the following venues: CHI, CHI Play, Mobile HCI, ACM Multimedia, CSCW, IUI, DIS, EICS, HCOMP, IEEE VR, Social Media + Society, and ACM Creativity and Cognition. I have served in the PC for CHI LBW 2017, 2020, 2021, for HCOMP 2021, and for IUI 2015, 2019, 2020, 2021, and 2022.

Teaching

I have worked as a Teaching Assistant for Computer Science and HCI courses at Texas A&M University (2009-2018). I have led labs, developed curriculum, graded, and occasionally lectured for classes in HCI, Discrete Mathematics, Java, and C++. I also held computer and programming courses to students in 8th-12th grade in a homeschooling community for Scratch, Processing, and general computer skills.

Software Development

I am a skilled full-stack developer with experience creating applications that run on the web, mobile devices, and distributed systems. I have been lead and co-lead on several large and well-used web applications, some with thousands of concurrent users. I am fluent in many programming languages, but prefer Python, R, Javascript, and C#. I have used frameworks, such as Salesforce, Node.js, Django, d3, jQuery, and Processing. I have experience with Data Science related technologies, such as server administration, database technologies, SQL, Elasticsearch, Hadoop, Apache Spark, AWS, UNIX, virtual machines, containerization, and scripts. I am experienced managing software teams and assorted administration tools and workflows, including Git, Visual Studio, various operating systems and ticketing systems. Additionally, I am proficient in media production for images (e.g., Photoshop, photography), video (Premiere Pro), and documents (LaTeX).

Art Projects

- *Blue Link City, 2018* Interactive Virtual Reality that shows content from Reddit as a cityscape. Used big data and visualization techniques to spatialize communities and incorporated live social media content.
- *Doorway to the Soul, 2015* Interactive <u>art collaboration</u> with Jamie Zigelbaum and Jimmy Tran. 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 released an iPad application / toy for toddlers.

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