

JEFF GINGER'S CURRICULA VITAE

JULY 2023 | 630.464.0047 | GINGER@ILLINOIS.EDU

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WORK EXPERIENCE



**Visiting Research Scientist,
Postdoctoral Associate**

College of Education (Education Psychology)
Illinois Informatics (iSchool)
University of Illinois at Urbana-Champaign

2020 – present

(1) Supporting Personnel for the NSF National AI Institute for Inclusive Intelligent Technologies for Education ([INVITE](#)):

- ▶ Currently working on the website and media design and development as well as advisory and assistance with project conceptualization and coordination
- ▶ Anticipated roles starting in Fall of 2023 will include assisting with data management and migration, full-stack development for pedagogical agents and implementation of pilot programs to broaden participation and include underserved learners in school and informal settings

(2) Primary instructor for INFO 333: User Experience in Action, a 100 student online course focused on introducing students to the artistic, technical and social science components of design.

(3) Core Personnel for [Project WHIMC](#), a long-term, large-scale NSF-funded grant:

Multipurpose role included project management and leadership, media production, design and development, curriculum and instruction, as well as computational and social science research

- ▶ Oversight of several teams of student employees for content creation, research, technical systems, university classes and special projects
- ▶ Technical work involving server upkeep, updates and systems for automated use analysis, content creation and interaction design focused on improving UX and science realism, IT systems deployment and upkeep, writing and updating code (java) for data collection and curating datasets and information architecture for AI-based education agents (natural language, image analysis, path-finding)

- ▶ Worked to establish partnerships and coordinate summer or after-school camps and data collection with [Fiske planetarium](#) in Boulder, [Gold Crown Foundation](#) in Edgewater/Lakewood, [InventHQ Makerspace](#), part of the Broomfield Public Library in Colorado, the [Versant Power Astronomy Center](#) at the University of Maine, Whitefield Elementary and Caribou Community School in Maine, and [Urbana Neighborhood Connections Center](#), Glen Oak Community Learning Center in Peoria, Mahomet Middle School and Ridgewood High School in Norridge in Illinois
- ▶ Collaboration with the [Ateneo Laboratory for Learning Sciences](#) in the Philippines to create a mirror of our project as well as variations making use of Minecraft Education Edition
- ▶ Assisted in creation of a companion Planetarium show and exhibit, as well as associated programming for workshops, events and post-show activities
- ▶ Feedback, testing and user referral system as well as an interactive exhibit for [PBS Nova Exoplanet lab](#)
- ▶ Initiated and orchestrated an [Exoplanet World Building Competition](#) in collaboration with Planet Minecraft and Astronomers and scientists from several notable institutions, including the NASA via JPL, Harvard and more
- ▶ Similar types of assistance with a [STEM-C project](#), a related NSF-funded grant on fostering computational creativity, data science literacy and teaching kids how to program for STEM applications – this work also included assisting in the design of a code comparison tool



**Creative Technology
Coordinator**

Jefferson County Public Library
West of Denver, Colorado

2020

- ▶ Assisted in planning, research and development for capacities to enable new technology services
- ▶ Implementation of resources for AV recording, digitization and assistive technologies
- ▶ Created curriculum and videos for in-person and online creative technology training workshops
- ▶ Pushed for stronger and more collaborative security, asset and information management practices



The Director

Champaign-Urbana Community Fab Lab
University of Illinois at Urbana-Champaign

2014 - 2020

- ▶ Oversight and guidance of all operations and project teams at both the main fab lab and all remote fab lab locations in CU as well as handling of local and international PR
- ▶ Established the core mission to include education, research and art-entrepreneurship
- ▶ Leveraged a range of local, state and federal resources to grow staff from three to over twenty, amplified funding ten fold and increased building space allocation by 3 times; quadrupled total level of programming
- ▶ Continual "lead from the front" style involvement with many operational aspects of the lab, including community engagement, instruction, IT, media, etc
- ▶ Development and coordination of several Fab Lab research teams and multiple courses, events and grant collaborations
- ▶ Coordinated summer camp operations since 2014, personally leading and developing several and seeding others; 40+ unique offerings in total, reaching hundreds of youth over the years



**Program Coordinator
and Adjunct Faculty**

School of Information Sciences (GSLIS)
Illinois Informatics (Institute)
University of Illinois at Urbana-Champaign

2011 - 2020

- ▶ Proposal, development, execution and evaluation for state and nationally-funded grants
- ▶ Assist with administration and event coordination (such as [CU Make](#) and [Playful by Design](#)) and student mentoring
- ▶ Membership in multiple faculty working groups, including Prairie Futures, TIER ED and Playful by Design, with a focus on promoting design thinking and digital literacy education at UIUC
- ▶ Over 8 years experience developing and teaching numerous Informatics, Information Science and Art Education studio courses on user experience, rapid prototyping and community engagement; directed several independent studies; one or more per semester



**Operations Lead and
Community Outreach**

CU Community Fab Lab
University of Illinois at Urbana-Champaign

2012 - 2014

Helped to transition the Fab Lab from a small-scale all-volunteer operation to a hybrid staff-volunteer community-engagement network

Much like running a small non-profit, this job entailed many tasks: (1) program implementation and curriculum development, (2) recruiting and managing staff and volunteers, (3) community engagement and media production, (4) equipment acquisition, upgrades and maintenance and (5) research, evaluation, grant writing and publishing



Research Assistant

School of Information Sciences (GSLIS)
University of Illinois at Urbana-Champaign

2008 - 2009, 2012

Assisted with web development and graphic design as well as program development, execution and evaluation with several grants for both the Center for Digital Inclusion and Community Informatics Initiative



Teaching Assistant

Graduate School of Library and Information Science
Illinois Informatics Institute
Department of Sociology
Program on Intergroup Relations
University of Illinois at Urbana-Champaign

2007 - 2011

Courses: (1) Libraries, Information and Society, (2) Community Engagement, (3) Social Aspects of Information Systems, (4) Social Perceptions of the Family, (5) Social Research Methods, (6) Introduction to Sociology, and (7) Intergroup Dialogue Facilitation on Race and Ethnicity



**Computer and Network
Technician**

University Housing
University of Illinois at Urbana-Champaign

2003 - 2008

Extensive IT technician and user support experience, also included an internship for CDW Corporation



**Web Design and
Development**

ROC Group Chicago (2003 only)
Numerous University organizations

2003 - 2008

Web design, development and support for student, professional and academic organizations

EDUCATION



PhD Library and Information Science
Social and Community Informatics

University of Illinois
at Urbana-Champaign

2009 - 2015

Dissertation: [Capturing the Context of Digital Literacy: A Case Study of Illinois Public Libraries in Underserved Communities](#)

Course work included history and foundations of information science, additional research methods experience (qualitative) and various individual topics of study in social and community informatics: distributed knowledge, ubiquitous learning, IT and the black experience, community engagement, human-computer interaction, geographic information systems, and digital literacy



PhD Sociology
(transferred, incomplete)

University of Illinois
at Urbana-Champaign

2006 - 2009

Masters paper: [The Facebook Project: Performance and Construction of Digital Identity](#)

Course work equivalent to a masters with emphasis on science and technology studies, race and ethnicity; classes included social science research methods (ethnography, interviews, surveys, intermediate statistics), classical sociology theory, exploration into individual topics of identity and racism, art interactivity and interface design



BA Sociology
minor in Computer Science

University of Illinois
at Urbana-Champaign

2002 - 2006

Course work and senior projects included digital ethnography, the design of accessible web resources, black leadership + leveraging ICTs and community history and racism in Illinois

NOTABLE PUBLICATIONS AND PRESENTATIONS

PRESENTATIONS

Lane, H. C., Comins, N., Ginger, J. (2023). "Culminating Ateneo WHIMC Event." Keynote presentation (virtual) for Ateneo University in the Philippines, 03.2023

Ginger, J. (2022). "Code, Art and AI in Education: Teaching Astronomy with Minecraft." Public lecture with CU Science Discovery at Lafayette Public Library, 03.2023

Lane, H.C., Ginger, J. (2020). "[Interest, Play and Learner Engagement](#)." Public lecture and podcast at Ateneo University in the Philippines, 02.2020

Ginger, J. (2019). "Makerspaces, Education and Libraries in the US." Speaking on behalf of the US State Department at the Trends in Libraries Conference, [State Scientific Library in Banská Bystrica](#), 05.2019

Ginger, J. (2019). "Research and Education with the CU Community Fab Lab." [Beckman Curious and Eclectic Speaker Series](#). Beckman Institute, 03.2019

Ginger, J., Bievenue, L. (2018). "[Research Models and Methods to Assess Learning Outcomes in Makerspaces in Formal and Informal Education Settings](#)" [iSchool Research Showcase](#), UIUC, 10.2018

Ginger, J., Choate, C. (2018). "The CU Community Fab Lab and The Urbana Free Library." A presentation for the Rotary Club, Clark-Lindsey Retirement Community, 05.2018

- Ginger, J. (2017). "It's not DIY. It's DIWO: do it with others." [PechaKucha @ Pygmalion Festival 2017](#). Location 51 Main, 09.2017
- Chan, A.S., Ginger, J. (2017). "[Design Research: The Space of Design Research](#)." Erlanger House, University of Illinois, [Design Research Initiative](#), 04.2017
- Ginger, J., Linder, S., Silverman, D. (2017). "[Curriculum at the Fab Lab](#)." Teaching with Technology Seminar Series, Center for Innovation in Teaching and Learning, UIUC, 02.2017
- Ginger, J. (2016). "[Beyond DILP: Metacognitive Strategies for Learning and Design Center Public Engagement](#)." University of Illinois Extension Annual Conference, UIUC, 10.2016
- Ginger, J. (2016). [Starting a Small Community Fab Lab](#). Videos published as a deliverable for the [Digital Innovation and Leadership Program](#), 2016
- Ginger, J., Nelson, J. (2016). [Fab Labs: Opportunities for Education, Research, Entrepreneurship and Communities Georgia's Innovation and Technology Agency](#) (abroad), 03.2016.
- Ginger, J. (2015). Fab Labs: Opportunities for Education, Research, Entrepreneurship and Communities. [University of Costa Rica](#), 04.2015
- Nicholson, S., Ginger, J., Mayer, B. (2013). "Monster or Bust: Enabling Youth through 3D Modeling and Printing." A presentation in Creating Game-Based Makerspaces, American Library Association Annual Conference, Chicago, 06.2013
- Ginger, J. (2012). "Building Capacity for Innovation through a Local Community Fab Lab Network." Harold Washington Library Center, Chicago, 11.2012
- Ginger, J. (2012). "User Experience Design." a presentation to the Illinois IDEA organization at UIUC, 10.2012
- Ginger, J., McGrath, R. Barrett, B. & McCreary, V. (2012). "[Mini Labs: Building Capacity For Innovation through a Local Community Fab Lab Network](#)" [Fab8nz \(agenda\)](#), Wellington, New Zealand 2012.
- Ginger, J. (2011). "Fostering Digital Literacies with Storytelling in [Stop] Motion", [GSLIS in a Flash](#), UIUC, 10.2011
- Ginger, J. (2009). "The São Tomé Map Project: Empowering People through Geographic Information Systems, GIS Fair 2009, UIUC, 12.2009
- Ginger, J. (2009). "Uncovering Racism on Facebook", a follow-up, a presentation to DTC 475 at Washington State University, Vancouver, 07.2009
- Haythornthwaite, C., Twidale, M., Ginger, J. (2009). "Facebook and Ubiquitous Learning" [HASTAC conference 2009](#), UIUC, 04.2009
- Ginger, J. (2008). "Web2.0 Resources and the Digital Divide: The Good, The Bad, and the Ugly", presentation to the Mortenson Center Associates, UIUC, 10.2008
- Ginger, J. (2007). "The Facebook Project: Social Capital and the Chief." Ethnography of the University Initiative Student Conference, UIUC, 11.2007

PAPERS

- Lane, H. C., Yi, S., Gadbury, M., Ginger, J., Comins, N., Henhapl, J. (2022). Triggering interest with Minecraft: Effects of a hybrid summer camp on STEM interest and engagement. [Technology, Mind, and Behavior: Innovations in Remote Instruction](#)
- Gadbury, M., Zimmer, K., Ginger, J., & Lane, H.C. (2022). How adolescent learners in a STEM summer camp represent astronomy concepts through a drawing exercise. Chinn, C., Tan, E., Chan, C., & Kali, Y. (Eds.), *Proceedings of the 16th International Conference of the Learning Science – ICLS 2022* (pp. 1928 – 1929). Hiroshima, Japan: International Society of the Learning Sciences.

- Mahajan, J.M., Hum, S., Ginger, J., Lane, H.C. (2022). "[MineObserver: A Deep Learning Framework for Assessing Natural Language.](#)" The International FLAIRS Conference, Florida
- Lee C., Samuel N., Israel M., Arnett H., Bievenue L., Ginger, J., Perry, M. (2020) "[Understanding Instructional Challenges and Approaches to Including Middle School Students with Disabilities in Maker activities: A cross-case analysis.](#)" FabLearn 2020, Columbia University, New York
- Ginger, J. (2015). "[Capturing the context of digital literacy: a case study of Illinois public libraries in underserved communities.](#)" Dissertation. Available online at the Illinois Digital Environment for Access to Learning and Scholarship, IDEALS
- Ginger, J. (2009). "[Storytelling in \[Stop\] Motion.](#)" *VOI]CES*, 2(1), 9. Available online at the Illinois Digital Environment for Access to Learning and Scholarship, IDEALS
- Ginger, J. (2008). "[The Facebook Project - The Missing Box: The Racial Politics Behind the Facebook Interface.](#)" Available online at the Illinois Digital Environment for Access to Learning and Scholarship, IDEALS. [First follow-up](#), [second follow-up](#)
- Ginger, J. (2008). "[The Facebook Project - Social Capital and the Chief.](#)" Available online at the Illinois Digital Environment for Access to Learning and Scholarship, IDEALS
- Ginger, J. (2008). "[Digital Divide 2.0: African American Communities and Library Resources in Illinois](#)" Available online at the Illinois Digital Environment for Access to Learning and Scholarship, IDEALS
- LoDolce, K., Ayad, M., Ginger, J., McCauley, S., Thompson, A., Williams, K., Jamali, B. (2008). "[Prairienet and community networking: An annotated bibliography.](#)" Available online at the Illinois Digital Environment for Access to Learning and Scholarship, IDEALS

POSTERS

- Hum, S., Stinar, F., Lee, H.J., Ginger, J., Lane, H.C. (2022). "Classification of Natural Language Descriptions for Bayesian Knowledge Tracing in Minecraft." [Artificial Intelligence in Education 2022 Annual Conference](#), Durham, UK.
- Gadbury, M., Zimmer, K., Ginger, J., Lane, H.C. (2022). "[How Adolescent Learners in a STEM summer camp represent astronomy concepts through a drawing exercise.](#)" [International Society of the Learning Sciences Annual Meeting 2022](#), Hiroshima, Japan.
- Guerrero, B., Lane, H.C., Ginger, J., Lawson, W., Mattson, E. (2021). "[Integrating computational thinking and science learning in Minecraft.](#)" Technology, Mind and Society Conference, online, 11.2021.
- Lane, H.C., Comins, N., Perez-Gallego, J., Condon, D., Gadbury, M., Ginger, J. (2021). "[WHIMC: Inspiring and Strengthening STEM Interest with Games and Informal Learning Environments.](#)" Advanced Informal STEM Learning annual PI conference, online, 10.2021
- [CU Community Fab Lab Road Show](#), numerous dates, events and locations, 2014-2019
- Ginger, J., Butt, E., Kumaran, A. (2019). "[Iterative Learning With Lithophane Light Boxes.](#)" FabLearn 2019, New York, 03.2019
- Ginger, J., Israel, M., Teasdale, R., Bievenue, L., Linder, S., Bentz, J. (2016) "[Towards a Progressive Model for Metacognitive Strategies and Makerspace Learning.](#)" [iSchool Research Showcase](#), UIUC, 10.2016
- Ginger, J. (2019). "The Digital Innovation Leadership Program (DILP)", [GSLIS Research Showcase](#), UIUC, 04.2015
- Ginger, J. (2019). "Service Roles, Community Engagement and Digital Literacies: A qualitative study of Illinois Public Libraries in Underserved Communities." [GSLIS Research Showcase](#), UIUC, 03.2014
- Ginger, J. (2019). "Champaign Urbana Community Fab Lab." [Public Engagement Symposium](#), UIUC, 03.2014

Ginger, J. (2019). "The Local Fab Lab Network as Community Informatics: Avenues for LIS-oriented Inquiry." [GSLIS Research Showcase](#), UIUC, 03.2013

Champaign-Urbana Community Fab Lab: Community MiniLabs, [Public Engagement Symposium](#), UIUC, 02.2012

[GSLIS Student Community Engagement](#) 2012, Public Engagement Symposium, UIUC, 04.2012

[Enabling Spatial Data Infrastructure Development: Collaboration](#), Supportive Web Technologies and São Tomé, [iSchools iConference 2011](#), Seattle, 01.2011

[Community Informatics Club](#), Public Engagement Symposium, UIUC, 04.2011

[Exploring Methods in Community Informatics](#), [iSchools iConference 2010](#), UIUC, 02.2010

ACADEMIC WORKSHOPS

Lane, H.C., Ginger, J. (2020). "WHIMC collaboration with ALLS and Arete." [Professional development workshop](#) for Ateneo University in the Philippines, 02.2020

Ginger, J. (2018). "Minecraft 3D Printing for Teachers." Professional development workshop for University of Illinois Extension Teacher Tuesdays event, Fulton-Mason-Peoria-Tazewell Unit, Peoria, IL, 04.2018

Ginger, J., Serbanuta, C. (2017). "Storytelling with Quantitative & Qualitative Evaluation Methods." Presentation for the [Mortenson Center Moldovan Librarian Associates](#), UIUC, 07.2017

Linder, S., Ginger, J., and Nelson, J. (2016). "Arduino Powered Pom Pom Robots for Fun and Learning." [Fab Learn Conference](#), Palo Alto, 10.2016

Twidale, M., Ginger, J. Organisciak, P., Floyd, I., Smith, B. (2013). "[Tech Learning Potluck](#)" and "[Design Jams in iSchools: Approaches, and examples](#)," [iSchools iConference 2013](#), Fort Worth, 02.2013

Twidale, M., Ginger, J. Organisciak, P., Floyd, I. (2012). "[Design Jam Session: Approaches, Challenges and Examples](#)," [iSchools iConference 2012](#), Toronto, 02.2012

AWARDS AND GRANTS

Listed in "[Ten Notable Dissertations of 2015](#)" by [American Libraries](#) magazine

[List of Teachers Ranked as Excellent](#) in Fall 2007, Spring 2007, Spring 2008, Spring 2012, Fall 2012, Fall 2014, and Spring 2017

Supporting Personnel on AI Institute for Inclusive Intelligent Technologies for Education (INVITE) – National Science Foundation (2023-2028) #2229612, with Principle Investigator H. C. Lane, Co-PI's Kristy Boyer, ChengXiang Zhai, Diego Zapata and Jamie Payton - \$19,998,746

Core Personnel on Advancing Informal STEM Learning (AISL) - National Science Foundation (2017-2023) "[Fostering Enduring Interest in STEM through Exoplanet Education and Interactive Exploration and Creation of Potentially Habitable Worlds](#)" #1713609 & #1906873, with Principle Investigator H. C. Lane, Co-PI's N. Comins and J. Perez-Gallego - \$299,949 and \$2,738,242

Core Personnel on STEM + Computing (STEMC) - National Science Foundation (2019-2022) "[Cultivating Creativity to Integrate Computation and Science Problem Solving in Informal Learning](#)" #1934087, with Principle Investigator H. C. Lane - \$530,459

Principle Investigator on Discovery Research K-12 (DRK-12) - National Science Foundation (2017-2019) "[Project MAPLE: MAKerspaces Promoting Learning and Engagement](#)." In collaboration with Maya Israel (Co-PI) and Lisa Bievenue (Co-PI), awarded \$669,253

Advisory board and instruction on Advancing Informal STEM Learning (AISL) - National Science Foundation (2017-2019) "[Fostering Interest in Science through Interactive Exploration of Astronomy What-If Simulations.](#)" In collaboration with H. Chad Lane (PI), Neil Comins (Co-PI) and Jorge Perez-Gallego (Co-PI), awarded \$299,949

UC2B Community Benefit Fund (2017-19) - Urbana Neighborhood Connections Center Teen Tech Learning Lab. In collaboration with Janice Mitchel and Jared Dunn, awarded \$24,410

Illinois Learning Sciences Design Initiative (ILSDI) Seed Funding Program (2015-2016) - "**Making a difference: Project based approaches to STEM engagement in Middle School.**" In collaboration with Emma Mercier (PI), Sharlene Denos, Barbara Hug and University High School staff, awarded \$37,000

Advisor for **Makers UIUC - CU Make**, winners of the 2016 Chancellor's Public Engagement Student Fellows Award. In collaboration with Joey Lund, Sophia Pipathsouk, Cameron Alberg, Lawrence Elizter and Isak Massman, awarded \$825

The Chancellor's Public Engagement Student Fellow Award (2015) for **Open-Source Makerspace Curriculum**, in collaboration with The Urbana Free Library. Awarded \$1500.

Department of Economic Opportunity and Commerce – Eliminate the Digital Divide (2014-2015). "**Digital Literacy for ALL.**" In collaboration with Martin Wolske (PI), Lisa Bievenue and the Center for Digital Inclusion, awarded \$106,000

University of Illinois Extension and Outreach Initiative – Enhancing Economic Development in Illinois with Digital Tech Hub Creativity Studios. "**Digital Innovation and Leadership Program.**" In collaboration with Jon Gant (PI), Lisa Bievenue and the Center for Digital Inclusion, awarded \$300,000

City of Champaign Digital Divide Grant (2012). Written in collaboration with Reverend Nash of New Hope Academy, Champaign in collaboration with UC2B outreach operations, awarded \$3000

Community Informatics Initiative Grant for the Institution of Museum and Library Services (2009), assistance with reporting in collaboration with Sharon Irish

SERVICE

Gold Crown Foundation	2022-present
Teaching facilitators and participants how to use makerspace tools and develop activities for kids	
Denver Urban Skate Troop	2021- present
I help to lead an outdoor recreation and informal learning group of over 150 diverse individuals from the Colorado Denver metro region	
We are advocates for sustainable and environmentally-conscious transportation as well as social inclusion and enjoyable fitness	
Champaign-Urbana Community Fab Lab	2011-2020
Volunteered before I formally worked at the lab, and volunteered additional time on top of work	
I made sure the Fab Lab stayed committed to its mission of Public Engagement – this meant the lab was an equal balance between community outreach, free public access and services for University research and classes	
Included volunteering with connected community organizations like The Urbana Free Library, Urbana Neighborhood Connections Center and Urbana Public Schools for events and workshops	
Tap In Leadership Academy	2011-2015

Assisted with various digital literacy workshops, including helping kids to use multimedia equipment to plan, capture and edit video interviews

Preliminary summer camp workshops with the CUC Fab Lab, initial off-site mini-fab lab site

New Hope Academy 2012-2013

Wrote and secured a \$3000 grant from the City of Champaign to obtain equipment and hire a teacher

Developed and led digital literacy workshops (creating videogames, learning computer hardware), rebuilt and setup two computer labs (hardware, software, network, policy)

Community Informatics Club ([video overview](#)) 2008-2012

Conducted numerous volunteer and education projects in collaboration with community groups in Champaign county, East St. Louis, and Chicago

The club was key to forming and retaining the [Urbana Free Library technology volunteers](#), conducted workshops like [Storytelling in \[stop\] Motion](#)

Collaboration with the Urbana Independent Media Center - Zine Library, Books2Prisoners, WRFU

Awarded a \$2500 grant by UIUC student affairs for outstanding, cutting-edge community service

Various other clubs and organizations at the University of Illinois 2003-2013

Eclectic Design and Research Group, 2011-2013

Social Informatics Reading Groups, 2011-2012

GSLIS Action and Town Hall organization group, 2011

Research Writing Group, 2010-2011

Association of Undergraduate Sociologists, 2003-2008

Feminist Majority Leadership Alliance, 2005-2007

Beckwith Hall Training and Web Accessibility, Spring 2006

Avalanche alternatives to drinking weekend program, 2004-2005

I am also an Eagle Scout - I renovated a bird sanctuary to make it accessible again back in 2002

TECHNICAL SUMMARY

Rapid fabrication and modeling: Netfabb, Cura, Simplify3D, Meshmixer, Blender, Sculptris, TinkerCAD, AGIsoft, Arduino and many sensors, Silhouette Studio, SewArt, CNC routing and 3D scanning/printing packages, various tool drivers and interfaces

Programming: Java on IntelliJ with Maven and Gradle, [Github](#), open source game modifications (Minecraft, Spigot, Bukkit, Lua, etc) – and a few years ago ArcGIS, Google Maps API, VisualStudio, C++, Drupal, Omeka, Wikimedia

Web Development: Responsive HTML(5), CSS(3), JavaScript, php, MySQL, FTP and SSH (WinSCP), Apache, Dreamweaver, Wordpress, Emmet, UIKit framework

Graphics and AV: Adobe Premiere, Photoshop, Illustrator; Canva, Vis.me, Figma, Inkscape, iMovie, OBS Studio, Cakewalk Sonar (DAW), a variety of file converters, MIDI softsynths, wave editors, and vocal adjustment

Hardware: Extensive experience evaluating, building and repairing computers and servers, tablets, cell phones and peripherals (i.e. printers, scanners) of all kinds as well as most kinds of makerspace equipment, like lasers and 3D printers

Networking: Wireless and wired network administration, cloud and VM solutions, small-scale server applications and remote management

Office: Adobe Acrobat Pro, MS Office 365, Sharepoint, Google suite (Gmail, drive, calendar, docs), Monday.com, Clickup, Zoom, Slack, WebEx, Box

Security: Virus prevention, password management, automated backup and image-based lab management

OS: Comfortable using Windows, OSX, Ubuntu, iOS, and Android, various simple scripting and command line, a little work with virtual machines and AWS instances

“Soft” Skills – often related to the above:

- User experience / interaction / information design, usability testing and accessibility (design)
- Rapid prototyping and phased-fabrication for varied applications (invention)
- Teaching, leadership and organization (people management)
- Qualitative and quantitative social science research techniques (market studies)
- Critical sociology and divergent thinking skills (cultural studies)
- Editing, production and promotion (storytelling)
- Context-based writing, speech and graphic design (communication)