Coral Sheldon-Hess

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Education:

University of Pittsburgh – Master of Library and Information Science

Carnegie Mellon University – MS, Electrical and Computer Engineering

University of Virginia – BS, Electrical & Computer Engineering - *With Highest Distinction*, Minors: Computer Science, Chinese Language & Culture

Professional Experience:

Developer and Systems Administrator, October 2024 - present
Colorado State University Libraries - remote
- Technologies: WordPress, Alma/Primo, PHP, JavaScript, HTML5/CSS3, *nix command line, Springshare suite, Git, SiteImprove, Office and Google suites
- Improved accessibility and usability of library websites in collaboration with UX designer, other developers, content owners, and stakeholders.
- Currently serving as project manager of LibGuides cleanup and product owner of CSU's LibGuides platform.

Library Web Services Developer, March 2023 - September 2024
Bowdoin College - remote
- Technologies: Cascade CMS, EZproxy, Alma/Primo, WordPress, PHP, JavaScript (Angular), Python, XSLT, Perl, HTML5/CSS3, Bootstrap, Git, *nix command line, Adobe suite, Springshare suite, Constant Contact, Office and Google suites
- Maintained and improved the library's web presence.
- Performed troubleshooting on subscription database access and maintained EZProxy.
- Proposed, planned, and chaired Web Coordinating Committee for library website.
- Heavily customized Primo local and union views.

Sr. Healthcare Economics Consultant, June 2022 - January 2023
Optum - remote
- Wrote, validated, and maintained Python and SQL code to build tables and reports for healthcare quality and cost metrics aimed at minimizing low-value care provided to Medicare Advantage members.
- Converted team's project tracking from Excel into Rally Agile PM Tool.
- Created a QA process for the team to use in testing monthly Tableau reports.
- Updated and edited Tableau reports and their data tables in response to UX issues and data defects.
- Learned and documented numerous processes in order to simplify onboarding of new team members and sharing of artifacts outside of the team.

Product Liaison Engineer, August 2021 - March 2022
Coiled Computing - remote
- Reorganized and streamlined Customer Support Engineering processes and led stakeholders throughout the organization to get agreement on the team's immediate future direction, including hiring priorities.
- Unblocked data science users for a Python/cloud/data science startup.
- Interviewed and assessed candidates for hire.

- Grew QA testing infrastructure from reactive routine testing to encompass proactive new-feature testing.
- Performed exploratory, regression, unit, and end-to-end testing on Coiled product; identified testing issues; and wrote test plans.
- Added functionality to the Coiled API and Coiled Cloud code base (Python).
- Created and edited documentation.

Assistant Professor, Sept 2019 – July 2021
Community College of Allegheny County - remote after March 2020
- Worked collaboratively with colleagues to develop and assess the curriculum in CIT and DAT, including developing the initial offering of Data Analytics 2 (DAT 202).
- Taught remote/synchronous, online/asynchronous, and in-person courses, with an average student approval score of 4.6+ out of 5.
- Brought community partners (Nine Mile Run Watershed Association, Draw the Lines PA) into the classroom to give students experience with real data analytics projects.
- Shared course materials on GitHub in support of open educational resource (OER) efforts.
- Maintained Blackboard shells for all courses, in addition to Slack workspaces, to support and build community among students in DAT and CIT.
- Was awarded a grant to review OERs for use in DAT courses.
- Courses taught:
    o CIT 100 - Computer Fundamentals & Applications
    o CIT 115 - Information Technology Fundamentals
    o CIT 125 - Web Development (HTML, CSS, visual design)
    o CIT 145 - Programming in C
    o CIT 215 - Systems Analysis & Design (software development lifecycle)
    o MMC 150 - Interactive Front-End Development (JavaScript)
    o DAT 119 - Python 1 (plus an intro to command line interfaces)
    o DAT 201 - Data Analytics 1 (SQL, GIS tools, OpenRefine)
    o DAT 202 - Data Analytics 2 (Forecasting, pandas, GitHub practice)
    o DAT 204 - R for Analytics
    o SEM 105 - College Seminar (information literacy and "how to college")

Adjunct Instructor and Reference Librarian, Oct 2017 – Jul 2019
Community College of Allegheny County - Pittsburgh, PA
- Taught Python 1 (DAT 119), co-developed and team-taught the initial offering of Data Analytics 1 (DAT 201) in Spring 2019.
- Assisted patrons at library's reference and circulation/reserves desks, including performing reference interviews and providing reader advisory services.
- Taught library instruction sessions and created online learning objects in LibGuides.
- Updated MARC records and holdings information in Sirsi WorkFlows.
- Improved WorkFlows reports using OpenRefine; weeded the Reference collection and created a Popular Fiction collection.
- Served as collection developer for Computer Information Technology, Popular Fiction, and popular DVDs.

Librarian and Web Developer, Dec 2014 – Aug 2019
Freelance/Self - remote
- Updated and converted the University of Maryland College of Information Studies course INST 630, Introduction to Programming for the Information Professional (in JavaScript), to online format and taught a section in fall 2016.

- Located books, articles, theses, and conference proceedings; verified authenticity and date of public availability; and wrote declarations attesting to those findings for use in patent litigation.
- Maintained and updated websites, primarily in WordPress.

Web Services Librarian/Assistant Professor, Oct 2009 – Sept 2014
University of Alaska Anchorage - Anchorage, AK
- Designed, maintained, and improved library websites and web services (LAMP).
- Performed troubleshooting on subscription database access, including OpenURL resolving, EZProxy settings, and discovery layer issues.
- Served on the workgroups that chose the library's discovery layer and the consortium's OPAC.
- Chaired Web Development Team; and proposed, designed, and chaired Social Media Team; served on Assessment Team.
- Created the plan and supporting documentation for development of the library's web presence in a user-centric direction.
- Created a model for thinking about user-centricity of organizations. Both the model and the plan (previous bullet) have been used by user experience librarians and by libraries doing their own planning, internationally.
- Rapidly taught self on, then trained and supported colleagues in the use of web-based technologies.
- Served as liaison to/collection developer for School of Engineering.
- Provided in-person, phone, and online reference service.
- Installed and customized open-source web applications (e.g. LibStats, Omeka - PHP/MySQL) and led acquisition and implementation of web applications purchased from vendors (e.g. LibCal, LibAnswers), including coordinating policy development around their use.
- Managed multiple content management systems, including MODX, WordPress multi-site, LibGuides, and Open Atrium (a constrained form of Drupal).
- Created and edited videos and images for the web (Adobe suite, Camtasia).
- Performed usability testing on websites and vendor-supplied applications.
- Served as Acting Head of Systems in department head's absence (approximately 14 weeks).

Information Assistant, Dec 2008 - Aug 2009
Carnegie Mellon University - Institutional Repository (Field Placement, Spring 2009) - Pittsburgh, PA
- Utilized SHERPA/RoMEO database and web to research publishers' copyright policies.
- Uploaded documents into Digital Commons institutional repository and assigned Dublin Core metadata.

Information Assistant, Aug 2008 - Aug 2009
Carnegie Mellon University - Engineering & Science Libraries - Pittsburgh, PA
- Answered reference questions in person and remotely, utilizing engineering and science ejournals, databases, and print resources.
- Processed book donations.
- Created an engineering library blog and assisted colleagues in redesigning sections of the library website.

Summer Library Assistant, Apr 2008 - Aug 2008

Brentwood Public Library - Pittsburgh, PA
- Answered patrons' reference and circulation questions, provided reader advisory services, and assisted with computers.
- Checked materials into and out of the library, shelved materials, repaired damaged materials, and processed new materials.
- Assisted with adult programming, including an "Intro to Blogging" class.

Senior Consultant, Jun 2006 - Feb 2008
Booz Allen Hamilton - McLean, VA
- Supported US DOT's Vehicle Infrastructure Integration (VII, now Intellidrive) program as a wireless systems engineer, software requirements analyst, and project manager.
- Wrote sections of, managed subcontractors' input to, and coordinated/edited 60+ team members' contributions to the VII System Requirements Specifications.
- Refined document creation workflows, increasing documents' accuracy and decreasing creation time significantly.
- Analyzed/edited requirements for VII subsystems and applications, maintaining and updating requirements in Rational Requisite Pro.
- Contributed to several proposal teams, writing a key technical section of a $93M proposal and writing as well as editing/coordinating authors' contributions to a $6M proposal.
- Recruited and interviewed candidates for hire.

RF Engineer, Sept 2005 - May 2006
i5 Wireless, LLC - Lanham, MD
- Led the company's research and development initiatives, designing and testing antennas for use in waveguides within novel in-building wireless installations. Monitored and performed maintenance on existing systems inside government buildings, including the Securities and Exchange Commission and three Library of Congress buildings.
- Provided information about new wireless trends and emerging technologies to management.
- Interfaced with vendors, both in coordinating the setup of the company's new office and in procuring wireless test equipment.

Research Assistant, Jun 2003 - Aug 2005
Carnegie Mellon University - Electrical & Computer Engineering Department
- Performed research as part of the Antenna and Radio Communication (ARC) group and Center for Wireless and Broadband Networking.
- Designed and implemented experiments that created large data sets; analyzed data and created visualizations using MATLAB.
- Provided engineering expertise to Penn DOT's Tunnel Radio project, helping to design and build a system to retransmit AM and FM radio into two of Pittsburgh's tunnels.
- Maintained the ARC's website.

Honors and Awards:

- Bravo! Diamond Award for Relationships ("Awesome teamwork!") at UnitedHealth Group

- Scholarship recipient for Microsoft and Udacity Foundations of Machine Learning on Azure course
- 2017 NASA Datanaut
- Code4Lib 2014 Conference Diversity Scholarship Recipient
- ALA 2012 Emerging Leader, sponsored by the ACRL Science & Technology Section
- Pacific Northwest Library Association "LEADS" Leadership Institute, October 2010
- UCLA student scholarship to attend Electronic Resources & Libraries 2009
- High 5 Award (Booz Allen Hamilton), 2007 - In recognition of dedication to fostering a collaborative community across ITI Home Team 1 through participation in the Communications Focus Group.
- Performance Recognition Award (Booz Allen Hamilton), 2006 – For outstanding support and dedication in developing the subsystem specifications and interface requirements for the Vehicle Infrastructure Integration Project.
- Rodman Scholar (University of Virginia), 2000-2003; Echols Scholar, 1999-2000
- William L. Everitt Student Award for Excellence (2003)
- Eta Kappa Nu - Electrical Engineering Honors Society
- Tau Beta Pi - Engineering Honors Society

Professional Involvement:

- Oceans of Data Community of Practice (2020-2021)
- Code4Lib (2014-present)
    - Community Support Volunteer (online) (2024)
    - Conference Documentation Committee (2015-2020)
    - Conference Accessibility Committee (2016-2020)
    - Fiscal Continuity Workgroup (2016-18)
- Code for Pittsburgh (formerly Code for America - Pittsburgh) (2015-2020)
- Pittsburgh Python User Group (2018-2020)
- American Library Association (2008-17)
    - ALA Councilor-at-Large (2013-14) (elected governance position)
    - New Members Round Table (2008-14)
        - Member Services Director (elected board position) (2011-13)
        - Student and Student Chapter Outreach Committee (2008-10), Chair (2009-10)
        - Web Committee (2009-10), Chair (2013-14)
    - Library Information Technology Association (LITA) (2009-17)
        - LITA Local Task Force (2016-17)
- In the Library with the Lead Pipe (open access journal run on WordPress), Tech Lead (2013-15)
- Anchorage Programming Workshop (coding skills "for women and friends") (2013-2015) - Co-founder, Organizer, Teacher
- Alaska Library Association (2009-14)
    - AkLA board member - 2011-2014
    - Anchorage Chapter – President (2011), Past-President (2012-13)
    - New Members Roundtable – Founder and Chair (2011-12)
    - AkLA Annual Conference – Technology Coordinator (2010), Website Chair (2014)
    - Social Media Committee (2010-14), Chair (2013-14)
    - Web Team (2012-14)
    - Alaska Library Snapshot Day Committee (2011, 2012)

Conference Presentations and Panels:

- "Command Line Bootcamp," Co-leader, Code4Lib Preconference, 3/7/2016.
- "Level Up Your Coding with Code Club (yes, you can talk about it)," Code4Lib, 2/10/2015.
- "Inside the Notification Service," SHARE 2014 Fall Meeting, 10/13/2014.
- "Open source could save libraries! Maybe!," Open Source Bridge, 6/24/2014.
- "Technology, Librarianship, and Gender: Moving the conversation forward" (full day preconference, co-moderator) – "Codes of Conduct" (mini-session moderator), Code4Lib. 3/24/2014.
- "Battledecks!," (deck builder/MC), Alaska Library Association Annual Conference, 2014.
- "Tune in, Turn on, and Get Social," Panel Member, Alaska Library Association Annual Conference, 3/2/2014.
- "Challenges of Gender Issues in Technology Librarianship," Panel Discussion, ALA Midwinter Meeting, 1/25/2014.
- "Getting buy-in on user centricity," LITA National Forum, 11/10/2013.
- "Anchorage Programming Workshop," Anchorage Mini-Maker Faire, 7/27/2013.
- "Back in the Stacks, Bringing Professional Organization into Professional Life," ACRL New Members Discussion Group Panel Discussion at ALA Midwinter, 1/27/2013.
- "Librarians Build Communities: Advocacy Through Volunteerism," Pacific Northwest Library Association Annual Conference, 8/3/2012.
- "Emerging Leaders Team Seeking States to Host Librarians Build Communities," ALA Advocacy Corner, American Library Association Annual Conference, 6/24/2012.
- "Alaskan Librarians Build Communities," Alaska Library Association Annual Conference – Lightning Talks, 2/25/2012.
- "Social Media Starter Kit," Alaska Library Association Annual Conference, 2/18/2011.
- "Implementing New Tech Tools," DirLead (Alaska Public Library Directors' Leadership Group) Annual Meeting, 10/15/2010.
- "ALA Conference for Students and Introduction to NMRT," Chapter Meeting, Virginia/West Virginia branch of the University of North Texas's Library and Information Sciences Student Association (LISSA), 6/21/10.

Workshops and Training Sessions:

- "Digital accessibility for busy people," Solstice School, 7/27/2024.
- Excel & Google Sheets Workshop Series, Bowdoin College Library, summer 2023.
- "Tips for running better classes (and meetings) remotely," CCAC Center for Teaching & Learning Teaching Showcase. 2/26/2021.
- "Building an online community with Slack in the classroom," CCAC Center for Teaching & Learning Collaboration Tools Panel, 10/30/2020.
- "Introduction to GitHub," Western Pennsylvania OER Training Day, 7/11/2019.
- "Getting buy-in on user-centricity." Guest lecture for LIS 861, UW-Madison School of Library and Information Science. 5/5/14.
- "Intro to the Command Line." Anchorage Programming Workshop. 2/19/14.
- "WordPress Basics." Anchorage Programming Workshop. 10/16/13.
- "Technology Training for Part-Time Librarians." UAA/APU Consortium Library. 8/19/13.
- "LibChat Training." Training for Instruction & Reference Department, UAA/APU Consortium Library. 8/6/13.

"Introduction to GitHub." Anchorage Programming Workshop. 7/31/13.
- "LibCal Training (Using Calendars)." Training for UAA/APU Consortium Library faculty and staff.
  5/23/13, 5/28/13, and 6/11/13.
- "Web Fundamentals." Anchorage Programming Workshop. 5/22/13.
- "Twenty-Minute Training: Blogging Best Practices." UAA/APU Consortium Library's Library, Reference, and Information Technology Training Series. 4/9/13.
- "Using QuickSearch for Library Research." UAA Faculty ETech Fair. 2/15/13
- "LibAnswers Policies & How-to." Training for Instruction & Reference Department, UAA/APU Consortium Library. 11/27/12.
- "LibCal Training (Moderating Room Booking)." Training for Circulation staff, UAA/APU Consortium Library. 11/8/12 and 11/9/12.
- "Twenty-Minute Training: LibAnswers QuerySpy: Answering Questions Our Users Wanted to Ask." UAA/APU Consortium Library's Library, Reference, and Information Technology Training Series. 11/6/12.
- "Twenty-Minute Training: LibAnswers." UAA/APU Consortium Library's Library, Reference, and Information Technology Training Series. 8/28/12.
- "Using LibAnswers." Training for Instruction & Reference Department, UAA/APU Consortium Library. 8/14/2012.
- "Adding FAQs to the LibAnswers Knowledge Base." Training for Instruction & Reference Department, UAA/APU Consortium Library. 8/7/2012.
- "Writing to the Reference Blog." Training for Instruction & Reference Department, UAA/APU Consortium Library. 7/31/2012.
- "Using LibCal Room Booking." Training for Circulation staff, UAA/APU Consortium Library. 7/9/2012 and 7/13/2012.
- "Google+." Faculty ETech Fair, presented by UAA ELearning Working Group. 2/17/12.
- "Twenty-Minute Training: Google Plus." UAA/APU Consortium Library's Library, Reference, and Information Technology Training Series. 2/14/2012.
- "LibGuides Open Work Session." Training for UAA/APU Consortium Library faculty and staff. 12/14/11, 1/11/12, 7/16/13, 7/30/13, 8/12/13, 8/15/13, 8/21/13, 8/23/13.
- "Twenty-Minute Training: RSS and Google Reader." UAA/APU Consortium Library's Library, Reference, and Information Technology Training Series. 7/26/2011.
- "Twenty-Minute Training: Facebook Privacy." UAA/APU Consortium Library's Library, Reference, and Information Technology Training Series. 10/26/2010.
- "Twitter in the Classroom," UAA CAFE Cloud Computing in the Classroom Workshop. 3/26/2010.

Community and College/University Service:

Community
- Maine Master Gardner Volunteer trainee (2024)
- Sharing open educational resources on GitHub (2019-21)
- Team NPF (National Psoriasis Foundation) Cycle participant (2020)
- Alaska Hackathon organizing committee member (2013-14)
- American Diabetes Association Tour de Cure - Team Captain (2011-13)
- Anchorage Citywide Cleanup - organizer, AkLA-Anchorage (2011, 2012, 2013)

Colorado State University
- CSU Libraries Equity and Social Justice Advisory Group (2025-present)

- CSU Libraries Strategic Planning: Accessibility Needs and Toolkit Task Force, co-chair (2024-2025)

Bowdoin College
- Search committee: Research and Instruction Librarian (2024)
- Bowdoin College Accessibility Task Force (2023-2024)
- Bowdoin College Library Diversity, Equity, Inclusion, and Accessibility (DEIA) Working Group (2023-2024)
- Colby, Bates, and Bowdoin (CBB) Discovery Working Group (2023-2024)
- Bowdoin Discovery Working Group (2023-204)
- Bowdoin College Accessible Digital Signs Working Group (spring 2023)

Community College of Allegheny County
- College Council Curriculum Subcommittee Member (2021)
- Search committees:
  - CIT Cybersecurity Instructor (2021)
  - Business & IT Dean (2021)
  - Business & IT Associate Dean (2021)
- Strategic Plan contributor: Technology Scan, Strategic Opportunities and Threats (2021)
- Achieving the Dream Steering Committee (2019-21)
- Data Analytics, MMC, and CIT Advisory Committees (2019-2022)
- Open Educational Resources Workgroup (2018-present)
- Open House – representing CIT, DAT, and MMC (4/3/2019, 7/17/2019)

University of Alaska Anchorage
- Faculty Senator (2013-14)
  - Academic Computing, Distance Learning, Information Technology and eLearning Committee
- eLearning Working Group (2009-14), subcommittees:
  - UA Google Apps
  - Social Media in Education
  - Mobile Use Survey (Chair, 2013)
  - Cloud Computing
  - SafeAssign
  - Blackboard Shell
  - Sharepoint
- Engineering Librarian Search Committee (Spring & Summer 2013)
- Banned Books Week Planning Committee Member (2012)
- Staff Development Committee (2010-12)
- English Librarian Search Committee (Summer 2011)
- Electronic Resources Librarian Search Committee (Spring & Summer 2011)

Professional Development:

- Practical Accessibility (started 2024, still in progress)
- Code4Lib Conference (in-person: 2014-2016; virtual: 2020, 2021, 2024, 2025)
- American Sign Language 101 (online with QueerASL, 2025)
- axe-con Digital Accessibility Conference (2024, 2025)
- SafeZone (12/04/2024)

- CSU Symposium for Inclusive Excellence (10/2024)
- Supervision Certificate Program (Academic Impressions) (05/2024)
- Inclusive Leadership Certificate Program: Build Your Skills and Self-Awareness (Academic Impressions) (05/2024)
- Dawnland - Maine Indian History (University of Maine, online) (summer 2024)
- NHCUC/CCNH - Principles on What Anti-Racist Community Engagement Looks Like (12/2023)
- Navigating Library Management and Discovery: Advancing Diversity, Equity, and Inclusion (Ex Libris) (12/2023)
- DEI Foundations: Student Disability in Higher Education (Academic Impressions) (10/2023)
- Browser Changes: What, When, and How to Prepare your Library's Authentication (EBSCO & NISO) (08/2023)
- SpringyCamp (08/2023, 10/2024)
- Alma Administration Certification (03/2023)
- Primo VE Administration Certification (03/2023)
- National Workshop on Data Science Education (virtual, 6/22-6/26/2020, 6/14-6/18/2021)
- SAS Introduction to Data Science Statistical Methods (virtual, 6/8-6/9/2021)
- csv,conf,v5 & v6 (virtual, 5/13-5/14/2020, 5/4-5/5/2021)
- PyCon Education Summit and Trainers Summit (virtual, 4/23-4/24/2020, 5/12-5/13/2021)
- Three Rivers Educational Technology Conference (virtual, 1/18/2021)
- Microsoft and Udacity Foundations of Machine Learning on Azure course (self-paced, summer 2020)
- Intro Sec Con (virtual, 4/25/2020)
- User-Friendly, Comprehensive SAS Statistical Applications: Regression Models (12/10/2019)
- Western Pennsylvania OER Training Day (7/11/2019)
- Pittsburgh TechFest (2016, 2019)
- Intro to Python for Computer Science and Data Science: Teaching Students to Program with AI, Big Data, and the Cloud, Pearson Webinar (4/4/2019)
- Engaging Programming Students with Interactives, Pearson Webinar (3/25/2019)
- Code4Lib Midwest Regional Conference (2018)
- Metadata Analysis Workshop, Digital Library Federation (10/26/2017)
- NASA Datanauts (2017)
- Abstractions (2016)
- Google I/O (5/18/2016)
- The Data Scientist's Toolbox, Johns Hopkins University (2015)
- Open Source Bridge (2014)
- AdaCamp (2014)
- Library Information Technology Association Forum (2013)
- Developing a Web Analytics Strategy for Your Library: Using Data to Measure Success - ALA LITA Preconference (1/25/13)
- Getting to Wow: Customer Service Training (1/9/13)
- Consortium Library Reference Training Series (2009-14)
- UAA Faculty Technology Center TechCamp: InDesign (8/10/12)
- Pacific Northwest Library Association Annual Conference (2012)
- Alaska Library Association Annual Conference (2009-14)
- American Library Association Annual Conference (2008-12)
- American Library Association Midwinter Conference (2010, 2012-14)

- ALA Emerging Leaders program (2012)
- How to Deliver Great Customer Service (4/19/12)
- LITA Preconference: User Experience Design for Websites (6/24/11)
- ASIST&T Introduction to Information Architecture Webinar (1/14/11)
- CIOS A152 - Digital Imaging Concepts & Applications: Photoshop (UAA, spring 2011)
- Trendy Topics: Social Media: Twitter, Facebook, and More, an Online Conference (arranged for colleagues and attended) (4/20/11)
- PNLA Leads Leadership Institute (10/2010)