**Education:**

**University of Pittsburgh** – Master of Library and Information Science, 2009

**Carnegie Mellon University** – MS, Electrical and Computer Engineering, 2005

**University of Virginia** – BS, Electrical & Computer Engineering - *With Highest Distinction*, 2003 Minors: Computer Science, Chinese Language & Culture

**Professional Experience:**

*Assistant Professor*, Sept 2019 - present

# Community College of Allegheny County

* Worked collaboratively with colleagues to develop the curriculum in CIT and DAT, including developing the initial offering of Data Analytics 2 (DAT-202).
* Brought community partners (Nine Mile Run Watershed Association, Draw the Lines PA) into the classroom to give students experience with real data analytics projects.
* Received a grant to review open educational resources for use in DAT courses.
* Courses taught:

|  |  |
| --- | --- |
| * CIT 100 - Comp Fundamentals & Applications | * DAT 119 - Python 1 |
| * CIT 115 - Info Technology Fundamentals * CIT 125 - Web Development | * DAT 201 - Data Analytics 1 * DAT 202 – Data Analytics 2 |
| * CIT 145 - Programming in C |  |
| * CIT 215 - Systems Analysis & Design |  |

*Adjunct Instructor and Reference Librarian*, Oct 2017 – Jul 2019

# Community College of Allegheny County

* 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

* 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.

*Developer*, Sept 2014 - Dec 2014

# Center for Open Science

* Wrote metadata harvesters for the Shared Access Research Ecosystem (SHARE), to pull XML metadata from institutional and discipline repositories into a standardized JSON schema.
* Contributed vital expertise about metadata and library culture to the development of the SHARE system architecture and discussions of COS positioning/marketing to SHARE stakeholders.
* Contributed to the Open Science Framework with front-end (JavaScript, CSS, HTML) and back-end (Python) improvements, including unit tests.

*Web Services Librarian/Assistant Professor*, Oct 2009 – Sept 2014

**University of Alaska Anchorage**

* 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.
* Wrote a plan and supporting documentation for development of the library’s web presence in a user-centric direction, including Best Practices for Topic Guides and Library Social Media Marketing Plan.
* Created a model for thinking about user-centricity of organizations. Both the model and the Plan for the Web Presence have been used by user experience librarians and by libraries doing their own planning, internationally.
* 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, LibGuides, and Open Atrium (a constrained form of Drupal).
* 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)

* 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

* 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

* 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

* 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**

* 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:**

* 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-present)
* Code4Lib (2014-present)
  + Conference Documentation Committee (2015-present)
  + Conference Accessibility Committee (2016-present)
  + Fiscal Continuity Workgroup (2016-18)
* Code for Pittsburgh (2015-present)
* Pittsburgh Python User Group (2018-present)
* American Library Association (2008-17)
  + ALA Councilor-at-Large (2013-14)
  + New Members Round Table (2008-14)
    - Member Services Director (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), Tech Lead (2013-15)
* Anchorage Programming Workshop (2013-2015)
* Co-founder and co-host
* Teacher/trainer
* Alaska Library Association (2009-14)
* Anchorage Chapter – President (2011), Past-President (2012-13)
* New Members Roundtable – 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:**

* “Introduction to GitHub,” Western Pennsylvania OER Training Day, 7/11/2019.
* “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:**

* “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.

**Faculty Service:**

# Community College of Allegheny County

* Achieving the Dream Steering Committee (2019-present)
* Data Analytics and CIT Advisory Committees (2019-present)
* 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)

# Community

* Team NPF Cycle participant (2020)
* Alaska Hackathon participant, organizing committee member (2013-14)
* American Diabetes Association Tour de Cure - Team Captain (2011-2013)
* Anchorage Citywide Cleanup - organizer, AkLA-Anchorage (2011, 2012, 2013)

**Professional Development:**

* csv,conf,v5 (virtual, 5/13-5/14/2020)
* Intro Sec Con (virtual, 4/25/2020)
* PyCon Education Summit and Trainers Summit (virtual, 4/23-4/24/2020)
* 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)
* Code4Lib Conference (2014, 2015, 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)