JOSHUA SHUM

Systems & Data Analyst · **Information & UX Specialist** · **Product Designer** · **Project Manager**

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ABOUT ME

Information systems, user experience, and data management specialist with over five years of experience at the University of Toronto in roles working with divisional and enterprise-level systems in systems management, data analysis and reporting, and support. Proven ability to partner with cross-functional teams to identify their system and reporting needs, optimize workflows, and deliver actionable insights through dynamic and user-friendly data visualizations and dashboards. Passionate about leveraging technology to enhance the student experience by empowering teams to make data-driven decisions.

EDUCATION

Master of Information (Library & Information Science), University of Toronto — **Toronto, ON** (2020)
- **ALA-Accredited.** Coursework emphasizes the practice and theory of integrating design thinking, interaction design, and a user-centred approach to the growth, development, and operation of academic libraries.
- **Secondary Focus:** User Experience Design
- 3.9 GPA

Bachelor of Honours, Interdisciplinary Social Science, York University — Toronto, ON (2018)
- **Concentration:** Equity & Social Policy

SKILLS

Web / Media / Design	HTML / CSS · WordPress · Squarespace · Adobe Photoshop / Premiere Pro · Figma · Canva · Acrobat
User Experience	Quantitative and Qualitative Research Methods (e.g. guerilla and usability testing, Optimal Workshop) · Prototyping (Balsamiq) · Interaction Design · Information Architecture · Design Thinking
Data Management & Analysis	Power BI · Tableau · SQL · Excel · Google Analytics · OptimalWorkshop · Canvas LMS · Qualtrics
CRM & Enterprise-Systems	UniHub (Folio) · Symplicity CSM · Orbis Outcome (CLNx)
Productivity	Google Suite · Microsoft O365 (Word, Excel, PowerPoint, Teams, Stream, Bookings, Forms, OneDrive, SharePoint, Automate, BI, Visio)
Languages	English (native) · Cantonese (native speaker)

PROFESSIONAL EXPERIENCE

Systems & Data Management Officer — Toronto, ON
Student Success, Division of Student Life, University of Toronto — Feb. 2024 — *Current*
- Provide systems support, data management, user training, and reporting for the Division of Student Life on Folio (UniHub / CareerHub) and CLNx (Orbis Outcome)—enterprise-level platforms supporting the student experience at the University of Toronto, Canada's largest and top university— by delivering key departmental reports, system demos, and backfilling for the Lead, Systems & Data Management as required.
- Deliver term and annual data reports to stakeholders, translate complex datasets from multiple sources into actionable insights, and support strategic planning and decision-making through visual storytelling by developing and maintaining interactive data dashboards using Excel, Power BI, and Tableau to enable senior management to monitor and track student engagement metrics, conduct trends analysis, and support departmental reports.
- Troubleshoot user issues, conduct system demos, and ensure compliance with data governance, information security, and confidentiality policies.
- Collaborate with tri-campus partners, IT, and vendors to test configurations and features, manage roles and

permissions, troubleshoot and resolve technical issues, recommend system enhancements, and ensure functionality.
- Coordinated a data stewarding / reporting group with colleagues across departments at the Division of Student Life, to ensure accurate data collection and improve reporting quality and data integrity.
- Proven experience in implementing and maintaining complex administrative and database systems in supporting the transition from CLNx to Folio by conducting needs assessments focus groups for each department to identify appropriate system and user permission configurations.
- Nominated by colleagues and received a True Blue Award for "careful, determined troubleshooting and immaculate data thinking."

Web Designer (Casual)   Toronto, ON
Office of the Dean & Vice-Provost, School of Graduate Studies (SGS), University of Toronto   May 2022 — *Current*
- Design websites and content webpages to improve navigation and user experience across eight WordPress sites according to Web Content Accessibility Guidelines (WCAG) 2.1 and Accessibility for Ontarians with Disabilities Act (AODA) standards.
- Collaborate with subject matter experts to design content-rich webpages and enhance their visual appeal using plugins such as Kadence Block, ensuring information is presented in an engaging and comprehensive manner.
- Maintain an internal departmental organizational chart using Microsoft Visio for SGS management.
- Received a commendation for responsiveness, subject matter expertise, excellent work, and overall contributions to SGS through the University of Toronto's True Blue Recognition Program.

User Experience Specialist & Website Coordinator (Casual)   Toronto, ON
Tyndale University   Sep. 2024 — *Current*

- Maintain and improve web accessibility of two websites using WordPress.
- Providing website and UX consultations to staff and clients.

Student Development Coordinator, Career Resources & Online Technology   Toronto, ON
Engineering Career Centre, Faculty of Applied Science and Engineering, University of Toronto   May 2022 — Feb. 2024

- Oversaw the use of educational and informational technologies for the design, development, iteration, and administration of seven online work-integrated learning preparation courses and a centralized information and career resources hub on Canvas LMS for 5500+ students.
- Managed the recruitment, interviews, and supervision of three student staff throughout a multi-phased project, directing their activities in program redesign, user experience research, and data analysis, while tailoring guidance to their strengths and development goals; resulted in a measurable increase in student engagement—as evidenced by data metrics—compared to previous academic terms.
- Proposed and led an initiative to implement data collection standards to establish and maintain a database of resource page usage, student appointments, and events data to track key performance indicators and generate data reports, infographics, and visualizations using Power Automate and Power BI, enabling the team to make data-driven decisions.
- Planned and executed the implementation of a program and user experience evaluation by collecting and analyzing student usage data on career resources to drive future programming activities and resource development.
- Tested new software configurations and system features of Orbis and Symplicity (CSM) to support the transition to the new CRM in Fall 2024, including troubleshooting and resolving technical issues, participating in focus group meetings to determine unit needs, and drafting training content for co-workers.
- Organized and conducted a meticulous, multi-phased user experience redesign project using OptimalWorkshop, engaging 112 student and staff participants to gather qualitative and quantitative data (online card-sorts, first-click testing, and usability tests of mockups and prototypes), resulting in the creation of 35+ new resources and a complete overhaul of the information architecture for the centralized career resources hub and an improved user interface for both students and co-workers.
- Collaborated with key stakeholders to develop and document multiple cross-team workflows and business processes, including a streamlined events postings and promotion workflow across multiple platforms. This led to a significantly decreased event processing time and enhanced staff efficiency and communications, empowering the ECC to plan and promote career development workshops and employer information sessions to students consistently and efficiently.
- Provided training for troubleshooting and resolving complex technical issues / bugs for systems and software

including Symplicity (CSM), Quercus, Microsoft O365 (e.g., Word, Excel, PowerPoint, Forms, Bookings, Power Automate, Power BI, Lists, SharePoint, Stream, and Visio), and more.
- Presented at an academic conference on leveraging educational technology for career development.
- Co-led an initiative to research, demo, and test project management tool / softwares to improve cross-team collaboration, communication, and workflows.
- Co-managed the recruitment and supervision of student staff tasked with supporting program development, conducting user experience research, and data analysis.

User Experience Specialist & Website Coordinator (Part Time)   (Remote) Toronto, ON
Tyndale University   Oct. 2017 — Apr. 2024
- Previous Title(s): *Website Support & Content Developer*
- Maintained and improved web accessibility of three websites using WordPress and SnapPages.
- Supported the development and maintenance of an app and website as a UX, accessibility, and design consultant.
- Designed and conducted a user experience (UX) card-sorting study for a website redesign project.

Instructional Support Coordinator   Toronto, ON
Student Services & Learning Hub, Faculty of Information, University of Toronto   May 2021 — May 2022
- Provided operational support to the Student Services, Learning Hub, Careers Office, Advancement, and Recruitment and Admissions units, developed content and records management processes, and generated reports using Symplicity (CSM), SQL, and Excel to support outreach, communication, and reporting activities.
- Revised and maintained 180+ WordPress pages on the [Faculty of Information website](#) toward WCAG 2.1 AA and Accessibility for Ontarians with Disabilities Act (AODA) compliance.
- Oversaw Learning Hub activities by liaising between presenters and administrative staff to schedule, book, and prepare registration materials, program information, and audio-visual equipment for the iSkills program (academic, technical, and professional skills workshops), and providing or arranging for technical support coverage as required.
- Coordinated the staff schedule and training of 15 Technical Support Assistants (TSAs) to ensure coverage for in-person and remote delivery of 35 undergraduate- and graduate-level courses.
- Designed a relational database using MariaDB (similar to Microsoft Access) to track, manage, and generate reports for TSA hours to identify operational needs and to support budgetary decision making and reporting needs.
- Drafted, edited, and provided training sessions for faculty and staff on the use of classroom and information technologies and complex administrative systems to develop time-efficient workflows that enhanced user productivity.
- Supported the Careers Office's implementation of Symplicity (CSM) by testing, configuring, troubleshooting, and resolving technical issues with the vendor, and standardizing data to enable data-driven decisions through reporting.
- Tested and recommended educational technologies and provided training for faculty and staff on the use of classroom and information technologies to develop time-efficient workflows to prepare hybrid classrooms.

Educational Technology Assistant   Toronto, ON
Student Services & Learning Hub, Faculty of Information, University of Toronto   Aug. — Dec. 2021
- Recommended educational technologies and provided training for faculty and staff on the use of classroom and information technologies to develop time-efficient workflows to prepare hybrid classrooms.
- **Staff Administrative Support, Training, and Coordination**
  - Coordinated the staff schedule and training of 15 Technical Support Assistants (TSAs) to ensure coverage for the in-person and remote delivery of 35 undergraduate- and graduate-level courses.
  - Reviewed timesheets and created a database to track reported hours for budgeting and staff planning.
  - Provided logistical, event planning, and live technical support to staff for orientation and recruitment events with Zoom, GoToWebinar, and Teams for the next recruitment cycle.
- **Educational Technology Support**
  - Co-hosted weekly roundtables to support 77 faculty and instructors with leveraging hybrid classrooms to enhance digital pedagogical practices.
  - Maintained a repository of educational technology and remote-delivery resources for instructors.
  - Reviewed and updated digital content toward universal design principles.
- **Student and Alumni Information Services**
  - Designed and managed a space reservation and advising appointments system using Microsoft Bookings.
  - Maintained a record of visitors to the Learning Hub for COVID-19 contact tracing, answering visitor inquiries,

and ensuring the safe operation of the common space.
- Facilitated student and alumni professional development and networking by providing technical support to the faculty alumni association meetings and liaising website content updates.

Programming Technology Coordinator   Toronto, ON
Student Services, Faculty of Information, University of Toronto   May — Aug. 2021
- **Web Development and Universal Design**
  - Partnered with content editors overhaul existing pages on the Faculty website toward a more consistent, navigable user experience, with responsive web design using HTML and CSS, toward WCAG 2.1 AA compliance.
- **Staff Support and Training**
  - Coordinated and supported the training of the iSchool ePedagogy team by liaising with management to determine goals, priorities, and identifying development opportunities.
  - Provided live technical support to staff for over 17 recruitment, orientation, and graduation events with Zoom, GoToWebinar, and Blackboard Collaborate.
- **Student and Alumni Support**
  - Promoted experiential learning opportunities for students by fostering working relationships with internal and external partners through email and Symplicity, a Career Services Management (CSM) system.
  - Facilitated student and alumni professional development by implementing a more efficient process for submissions to the external job board, reducing the processing time of postings from 15 to 5 minutes.

Technical Support Assistant for Online Courses   Toronto, ON
Student Services, Faculty of Information, University of Toronto   Sep. 2020 — Apr. 2021
- Successfully supported the delivery of remote courses during the COVID-19 pandemic by providing with instructors and teaching assistants with educational and administrative technology support and training, resulting in a positive online teaching and learning experience as reported by students and teaching staff feedback.
  - **Fall 2020:** Supported 462 students in 8 courses; **Winter 2021:** Supported 194 students in 10 courses.
- Coordinated schedules of 11 staff to ensure proper coverage of supported courses.
- Conducted user research to improve administrative workflow improvements and inform new services, leading to the development of an online repository of guides, resources, and course templates for remote teaching.
- Assisted 19 instructors with course administration, information architecture, and design, using Canvas/Quercus.
- Offered weekly consultation sessions, in-class assistance, and email support to devise and implement active-learning strategies and hybrid delivery modules using Blackboard Collaborate, Zoom, and Microsoft Teams.
- Processed, edited, and uploaded class recordings with transcripts using MyMedia and Microsoft Stream.

Website Support   North York, ON
Tyndale University   Oct. 2017 — Dec. 2018
- Regularly checked and audited published content for broken or incorrect hyperlinks.
- Created over 200 webpages and articles using Drupal and WordPress.
- Coordinated with colleagues to connect and exchange resources with local organizations across Toronto.

Research Assistant   North York, ON
Tyndale University   Jun. — Aug. 2017
- Designed and implemented a digital file classification system to reorganize all department files.
- Created promotional materials and documentation for courses using InDesign, Publisher, and PowerPoint.

User Experience Librarianship Intern   Scarborough, ON
University of Toronto Scarborough (UTSC) Library   Jan. — Apr. 2020
- Created and executed 3 concurrent UX research and design projects examining digital and physical library spaces including a card-sorting and tree-testing study, usability test research methods of two library websites.
- Collaborated with the Web & UX Librarian to conduct 4 weekly UX Pop-Up tables to gather user feedback and suggestions for the UTSC Library Space Planning Committee.
- Co-developed and co-instructed an "Introduction to UX Design" workshop with 15 registered attendees.

- Presented UX initiatives, research progress, findings, and recommended next steps at library staff meetings.

Student Library Assistant (SLA)   North York, ON
Access & Information Services, University of Toronto Libraries at Downsview   Sep. 2019 — Apr. 2020

- Proved high-level of attention to detail using SirsiDynix Workflows by processing and checking library materials, from 5 major universities in Ontario for storage and retrieval at facility with over three million items.
- Trained and supervised new SLAs when full-time staff members are unavailable.
- Demonstrated problem-solving ability by identifying and correcting mislabeled material in library catalogues.

Community Engagement Coordinator   North York, ON
Community Engagement Coordinator   Jun. — Aug. 2014,
2015

- Designed and published an annual summer activity guide for Toronto residents.
- Demonstrated strong teamwork and communication skills by engaging with youth volunteers to plan community engagement, fundraising, and outreach activities including 4 sports days and 2 community events.
- Developed and presented outreach and engagement proposals using Microsoft and Google Suite applications, including Word, Excel, Publisher, PowerPoint, and Slides.

EXPERIENCE AND PROJECTS

Personal Portfolio Website   Sep. 2019 — *Present*

- Customizing my portfolio website using HTML, CSS, and JavaScript as both a personal, self-taught hobby with transferable professional outcomes.
- Using information technology and networking tools such as Google Cloud Platform and Google Analytics toward compliance with Accessibility for Ontarians with Disabilities Act (AODA) and Web Content Accessibility Guidelines (WCAG) 2.1 Level AA standards.
- Applied visual design principles in creating a user-friendly and navigable website.

UX / LIS Research Project with Noranda Earth Sciences Library, UTL   Jan. — Apr. 2020

- As part of a community-engaged learning initiative, my team of five partnered with the Head Librarian and frontline staff to design and execute a user research study examining user behaviours and use of library space to determine areas for improvement.
- Conducted 14 user interviews and 32 surveys to identify user pain points, resulting in 11 recommendations supported by user data analysis and alternative solutions for future consideration and implementation.

Information Architecture Redesign Project with CL&D   Sep. 2019 — Jan. 2020

- Managed a team of five classmates to redesign the information architecture (IA) for the Centre of Learning & Development, Toronto's website, <tccld.org>.
- Demonstrated versatility, adaptability, and strong leadership, communication, and organizational skills as the Project Manager, Lead Editor, IT/Networking Lead, and as the primary point of contact between project teams.
- Designed and executed a hybrid card-sorting study (using Optimal Workshop), stakeholder & user interviews, user observations, and usability tests with 15 participants.
- Designed a high-fidelity prototype website based on a proposed IA by analyzing collected user data.

Telempathy   Sep. — Dec. 2019

- Developed a clickable medium-fidelity prototype using Balsamiq for a student-centred platform for accessing mental health resources at the University of Toronto, in a team of four.
- Conducted user research with 16 participants through interviews, usability tests, and prototype evaluations.
- Created and presented bi-weekly slide decks using a storytelling approach for a panel of industry professionals.
- Participated in design thinking workshops to generate user empathy, user needs, ideas, and evaluation methods.

TIFF Next Wave — Jump Cuts Young Filmmakers Showcase — Finalist   May 2012

- Directed and edited the short film, *Rivals of the Cube*.
- Film selected to premiere at the Toronto International Film Festival Bell Lightbox theatres as a finalist from submissions across Ontario, Canada, by grade 9-12 students on the basis of proficiency in form, expression, experimentation and content.

SERVICE TO LIBRARIANSHIP & ENGAGEMENT

Co-Chair, Communications Committee   Jun. 2021 — *Current*
Faculty of Information Alumni Association (FIAA), University of Toronto

- Previous Title(s): *Chair, Website & Social Media Committee*
- Maintaining the association's social media presence across multiple platforms, including Facebook, Instagram, Twitter, Eventbrite, and LinkedIn.
- Developing a new information architecture for the Alumni information section on the Faculty's website.
- Coordinating with other committees to promote social, educational, and fundraising events.

Faculty Council Representative   Mar. 2021 — *Current*
Faculty of Information Alumni Association (FIAA), University of Toronto

- Attending regularly scheduled Faculty Council meetings on behalf of the Executive Committee.
- Voting on and providing reports of Faculty Council decisions and discussions to the Executive Committee.

Member
iSchool Class of 2020 & 2021 Continuity Working Group   Jun. 2020 — Apr. 2022

- Liaising with Spring 2020 graduates and the Faculty to reschedule cancelled end of year events (due to COVID-19), overseeing a budget of $10,000 from the Master of Information Student Council.

Program Coordinato*r* and Mentor   May 2019 — Apr. 2020
Peer Mentoring @ iSchool

- Led the peer mentorship program along with three co-coordinators as the primary contact (email, administrative, and general inquiries), and planned 4 community events with 124 registered attendees.
- Redesigned and piloted a new mentorship program with 109 mentees and 58 mentors.
- Attained recognition of the program in the official co-curricular record by partnering with faculty administrators and staff through the validation process.
- Reorganized the program's online repository and developed instructional guides for future coordinators.

Student Ambassador   Sep. 2019 — Apr. 2020
Faculty of Information

- Collaborated to organize an information day as a student representative to drive faculty initiatives and share engagement opportunities and experiences with prospective students.

Student Liaison   Sep. — Dec. 2019
Faculty of Information

- Designated point of communication for communicating student feedback and concerns with the Course Director toward improving student experience.

Class Representative   Sep. — Dec. 2018
Master of Information Student Council, Faculty of Information

- Served as the primary point of contact between fellow students and the council, and communicated social networking opportunities and events in weekly announcements.

Virtual Platform Coordinator   Oct. 2020 — Mar. 2021
World IA Day (WIAD) Toronto 2021

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- Headed the technical support team for WIAD volunteers, using Vi.to, Zoom, and Slack to host an online conference with over 350 registered attendees.
- Liaised with event organizers to provide technical advice and consultation when selecting the host platform.
- Assisted in the logistical planning of the event, trained, and led a team in editing and captioning session recordings.
- Provided day-of platform support to volunteers, speakers, and attendees.

Volunteer   Jan. — Feb. 2020
Ontario Library Association Super Conference (OLA SC)

- Offered attendee-oriented service, including workshop registration, informational, and directional help at the OLA's annual four-day conference, Canada's largest library organization and librarianship event.
- Supported conference speakers and attended workshop sessions on UX Librarianship and community collaboration and engagement in libraries.

Volunteer   Jan. — Feb. 2019
Ontario Library Association Super Conference (OLA SC)

- Programmed scanning devices to track session attendance and provided informational and directional help.
- Assisted and attended conference workshops and programs on community collaboration and engagement in libraries, and embedded librarianship.

Stepphansson House Representative & Social Media Manager   Sep. 2013 — Apr. 2014
Residence Council, Winters Residence, York University

- Elected as a voting member and representative to about 40 of the 300 students living on the residence.
- Collaborated to plan monthly floor- and residence-wide events and outings.
- Created and maintained a social media presence to promote council events and notices to residents.

PRESENTATIONS & INSTRUCTIONAL EXPERIENCES

Conference Presentations
1. Cohen, B., Deonandan, P., & **Shum, J**. (2023, October). *Balancing Individualized Support with Sustainable Scalability: Leveraging EdTech for Effective WIL Program Design*. Presenting at the York University Professional Development Conference, Toronto, Ontario, Canada.

2. Chan, M., **Shum, J.** & Sze, E. (2021, August). *What does it take? Developing inclusive and empathetic practices in a remote class*. Presented at the Digital Pedagogy Institute Conference, Toronto, Ontario, Canada.

Workshops
1. **Shum, J.** & Guay, S. (2020, April). *Introduction to UX Design*. Workshop presented at University of Toronto Scarborough Library as part of Entrepreneurship Week, Toronto, Ontario, Canada.

Non-Peer-Reviewed Poster Presentations
1. **Shum, J.** (2020, April 2). *Integrating cost-effective, lean UX research methods and design thinking in academic libraries: University of Toronto Scarborough Library*. Information Professional Practicum Exhibition, Toronto, ON, Canada.

2. Anderson, K., Secco, M., **Shum, J.**, Szakaly, A., & Zhan, J. (2020, April 19). *Noranda Earth Sciences Library UX Research Project*. User Experience (UX) for Galleries, Libraries, Archives, and Museums (GLAM) Showcase, Toronto, ON, Canada.

SELECT CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

Foundations of Data Governance & Architecture, School of Continuing Studies, University of Toronto   Jan. – Apr. 2024

Data Strategy, Project Management Institute on LinkedIn Learning   Oct. 2023

From Excel to Power BI, Knowledge Accelerators on LinkedIn Learning (Credential #: ZJJ3YNG2YRYX)   Oct. 2023

Power BI: Dashboards, LinkedIn Learning   Oct. 2023

Power BI: Essential Training, NASBA on LinkedIn Learning   Oct. 2023

Data Visualization for Data Analysis and Analytics, IIBA on LinkedIn Learning   Sep. 2023

Power BI: Getting Started, LinkedIn Learning   Sep. 2023

Excel: Macros and VBA for Beginners, LinkedIn Learning   Sep. 2023

Universal Design for Learning (UDL) Associate Credential - Level 1, CAST (Credential #: 16123-1678806541)   Mar. 2023

Business Metrics for Data-Driven Companies, Duke University on Coursera (Credential #: JZPKWVTNAVSN)   Mar. 2022

Data Warehousing and Business Intelligence, University of California, Irvine on Coursera (Credential #: EP8A6EK67ZYC)
Mar. 2022

Project Management: The Basics for Success, University of California, Irvine on Coursera (Credential #: DA33L2PA9NGR)
Mar. 2022

The Nature of Data and Relational Database Design, University of California, Irvine on Coursera (Credential #: 6DBUANZRE8FC)   Mar. 2022

Introduction to Structured Query Language (SQL), University of Michigan (Credential #: BLGTN4U59VKW)   Feb. 2022

Certified Microsoft Innovative Educator, Microsoft   May 2021

Inclusive Classroom Foundation, Microsoft   May 2021

Working Together: The Ontario Human Rights Code and the Accessibility for Ontarians with Disabilities Act, Ontario Human Rights Commission   Jan. 2021

PROFESSIONAL ASSOCIATIONS

Member, Toronto Regional Computer-Human Interaction (TorCHI)   Mar. 2021 – *Present*

Member, Ontario Library Association (OLA)   May 2020 – *Present*

Student Member, Ontario Library Association (OLA)   Sep. 2019 – Apr. 2020

HONOURS & AWARDS

Member of the Dean's Honour Roll, York University   2018
- Awarded to students graduating with an Honours Bachelor's Degree with 7.00 or higher cumulative GPA.

York University Continuing Student Scholarship, York University   2017
- Awarded to students with outstanding academic results in the previous Fall, Winter, and Summer sessions.