



Alexander Roessner

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About

Multidisciplinary IT leader, front-end developer, and 3D designer with over 20 years of experience building digital ecosystems in higher education. Known for blending innovation with execution across simulation technology, web development, and user experience with a proven record managing multi-million-dollar projects, pioneering simulation expansions, and modernizing enterprise IT operations.

Professional Experience

JANUARY 2022 - PRESENT

Manager, Interprofessional Healthcare Simulation Center

Office of Student Affairs, Health & Health Sciences, The University of New Mexico, Albuquerque, NM, USA

KEY RESPONSIBILITIES

MANAGING THE SIMULATION CENTER // Oversee the day-to-day operations of the Interprofessional Healthcare Simulation Center (IHSC), which supports clinical healthcare simulation for the diverse academic programs of Health & Health Sciences (HHS) campus at The University of New Mexico. The simulation center offers advanced simulation equipment (e.g., low-to-high fidelity manikins) to replicate various healthcare environments and scenarios including inpatient, outpatient, and acute care settings. These settings allow future healthcare professionals to practice in a controlled setting. The simulation center is equipped with 24 clinic rooms, 5 inpatient labs, 3 acute care simulation labs. There is also an annex supported by the simulation center that provides A/V capabilities for an additional 20 clinic rooms. As part of this role, manage the IT and AV infrastructure of the simulation center and any locations utilizing its enterprise recording software. Also responsible for the fair allocation of space to the varied academic programs and colleges, ensuring an adequate supply inventory, and coordinating any maintenance, installations, or repairs of equipment both internally and with external vendors.

SUPPORTING SIMULATED HEALTHCARE ACTIVITIES & SCENARIOS // Responsible for managing and supporting the Educational Management Solutions (EMS) SIMULATIONiQ (SIMiQ) software package to facilitate the Objective Structured Clinical Examinations (OSCEs) and high-fidelity simulation. SIMiQ is a comprehensive service package designed to enhance the delivery of simulation scenarios. It enables programs to schedule, automate, record, and index student/patient encounters, enabling efficient scoring, assessment, and reporting. The installed SIMiQ system supports continuous live recording using over 100 cameras across four locations, ensuring availability 24/7. This advanced setup enables seamless monitoring and capturing of simulation activities for effective evaluation and analysis.

EXPANSION, OPTIMIZATION & IMPROVEMENT // Identify areas for expansion, optimization, and improvement within the simulation center by regularly evaluating operational processes, technology usage, and overall effectiveness in achieving educational objectives. Collaborate with faculty, staff, and students to gather feedback and assess current practices. Analyze data and trends to recommend enhancements, ensuring the simulation center continuously evolves to meet the needs of learners and stays aligned with industry and academic standards.

MANAGING IT SUPPORT // As the IT manager for the Health & Health Sciences Offices of Student and Faculty Affairs, responsibilities include providing on-site and remote support for the users and technology in each office. This involves triaging computer issues, managing support staff, creating & updating support documentation, imaging workstations, providing purchasing recommendations, maintaining inventory, and performing necessary hardware and software upgrades.

Education

Information Systems & Assurance, MS-ISA

Anderson School of Management
The University of New Mexico
2016 - 2018

Management Information Systems, BBA

Anderson School of Management
The University of New Mexico
Cum Laude
2004 - 2010

Certifications

ITIL® v3

2014

Applications

ADOBE

After Effects / Illustrator / InDesign /
Photoshop / Premiere Pro / XD

MICROSOFT

Active Directory / Configuration Manager /
Group Policy / Microsoft 365 / SharePoint /
VS Code

OTHERS

3D Printing / Cinema4D / Final Cut Pro /
Git / Nomad Sculpt / Shapr3D /
Smartsheet

Languages & Frameworks

Bootstrap / CSS / HTML / JavaScript /
jQuery / JSON / PHP / Rails / Sass /
MySQL / MS SQL / XML

Platforms

DESKTOP

macOS / macOS Server
Windows / Windows Server

MOBILE

Android / iOS / iPadOS

OTHER

EMS SIMULATIONiQ / Hannon Hill CMS
(Cascade) / Pharos Enterprise Printing /
Wepa Enterprise Printing

ADVANCING SIMULATION TECHNOLOGIES // Leverage skills in 3D modeling software and 3D printing techniques to design and fabricate highly realistic anatomical and clinical simulation models. Employ casting methods using silicone, resins, and plasters to create durable, lifelike components that enhance the fidelity and effectiveness of healthcare training scenarios.

NOTABLE ACHIEVEMENTS

- (2023 – Present) Part of a team overseeing the design, construction, and management of a **\$5-million**, 2,500 sq. ft. expansion to the simulation center. The expansion will add more acute care environments, a physical therapy gym, and storage for the various specialized equipment required to perform simulations. The expansion will significantly enhance the range of simulation offerings and address a growing demand from academic programs seeking to replace clinical hours with simulation hours.
- (2023) Helped secure **\$1.5-million** in funding for upgrading, expanding, and improving service delivery in the IHSC. The allocated funds will be utilized to enhance classroom A/V and teleconferencing capabilities, convert rooms for multidisciplinary use, and add on-site laundry facilities to create a more realistic hospital environment and to reduce demand for linens being provided by the hospital.
- (2021 – 2022) Managed a project to expand the scope of the EMS SIMIQ service, resulting in a **doubling** of the simulation center's coverage and the establishment of a new location at the Health & Health Sciences Rio Rancho campus. This expansion has significantly increased the capacity for conducting concurrent clinical simulations across various disciplines, scenarios, and locations.

NOVEMBER 2017 – DECEMBER 2021

Programmer Analyst II

Academic Technologies, Information Technologies, The University of New Mexico, Albuquerque, NM, USA

KEY RESPONSIBILITIES

WEB DESIGN & PROGRAMMING // Responsible for the design, programming, and management of multiple websites across the campus. These websites catered to diverse audiences, ranging from small-scale websites (less than 1,200 hits per year) to the most popular pages on campus (with over 24-million hits annually). To develop and maintain these websites, had to possess or acquire in-depth knowledge of various technologies and programming languages, including Angular, Bootstrap, Cascade, CSS, HTML, JavaScript, JSON, jQuery, MySQL, PHP, Sass, and XML. In this role, also functioned as a UI/UX and design consultant for the IT Applications group, collaborating with their team to create prototypes, wireframes, illustrate use cases, and design user workflows.

MANAGING ENTERPRISE PRINTING // In response to a university-wide survey on information technologies, our team successfully achieved one of the key recommendations by transitioning the University from two, locally hosted printing services to a single, cloud-based printing vendor, Wepa. With a considerable volume of approximately 3 – 4 million pages printed annually by university students on more than 50 printers spread across the campus, this transition was a significant undertaking. Our dedicated efforts over the course of a year ensured a seamless transition for our students, providing them with enhanced convenience and options for printing. Throughout the process, we focused on expanding the number of printing locations, diversifying printing methods, and offering multiple payment options to cater to the diverse needs of our student community. The successful implementation of this project marked a substantial improvement in the overall printing experience for our university's students.

DESIGN & MARKETING // Responsible for creating logos and marketing materials for a wide range of sponsored events by the Office of the Chief Information Officer (CIO). These materials included advertisements, fliers, videos, posters, programs, websites, and social media campaigns. Each event required a unique and distinct look and feel on a yearly basis to set them apart from past events while adhering to the overall identity and branding of UNM. Designed printed materials for the 15 Information Technologies managed computer labs and computer classrooms spread across the campus. These materials served to inform visitors about the space, policies, and the staff responsible for managing the area. Throughout these design processes, it was ensured that the visual representations effectively conveyed the essence of each event and provided clear and relevant information to the audience. Maintaining consistency with UNM's branding guidelines was vital to create a unified and recognizable identity for all materials produced.

DATA ANALYTICS & REPORTING // On a regular basis, conducted data gathering and analysis using information gathered from different sources such as LabStats and Wepa. The primary goal was to create snapshot reports detailing the utilization of computers, printers, and servers supported by the University's IT department. These reports enabled our department to make well-informed decisions regarding the usage and placement of assets throughout the campus. By leveraging this data, we implemented efficient and effective improvements to enhance the overall IT infrastructure and services offered by the University.

OTHER DUTIES //

- Experience managing projects with multiple stakeholders (users, departments, campuses, and interests).
- Manage the vendor relationship between the University and the cloud-printing service provider Wepa.
- Manage, coach, and mentor employees responsible for the training and support of the University community for Adobe applications as part of the Adobe Creative Campus program.

NOTABLE ACHIEVEMENTS

- (2019) Part of a collaborative effort involving Information Technologies, University Libraries, and Adobe, Inc. to transform the University into a Creative Campus. This ambitious project made the full suite of Adobe Creative Cloud software available to the entire University. Additionally, we worked on creating a dedicated physical space where students could come together to learn, share ideas, and collaborate using these creative tools. This initiative sought to foster a vibrant environment that nurtured creativity, innovation, and collaboration among the University community.

- (2018) Co-managed a project to replace the University's on-premises enterprise print solution (Pharos) with a cloud-based vendor (Wepa). At the time, the University produced around 3 – 4 million printed pages annually. By switching providers, the University was able to expand the availability of on-campus printing with 50 all-in-one kiosks, allowing more flexibility in printer placement, unifying service delivery across several campuses, and offering multiple payment options (including mobile payments). Most importantly, the change also allowed University Libraries and Information Technologies to eliminate a combined \$215,000 annual cost for supplies, equipment, and maintenance.

AUGUST 2012 - NOVEMBER 2017

Multimedia Development Specialist

Academic Technologies, Information Technologies, The University of New Mexico, Albuquerque, NM, USA

KEY RESPONSIBILITIES

PHAROS PRINTING (PAWPRINTS) // Manage the enterprise student print service – PawPrints – for campus. This service outputs on average two-million pages annually. Managing this service required an understanding of server administration & management (Windows Server 2008), database administration & management (SQL Server Management Studio), establishing firewall rules, setting up & negotiating job cost models, billing integration with the University's LoboCa\$h system (CBORD, Odyssey), installing vendor upgrades & service packs, and the troubleshooting & training of others for the maintenance of the software & hardware of the 32 printers, four multifunction devices, and 33 release stations connected to Pharos across the three main branches of the university.

UNM ON ITUNES U // Tasked with the development, implementation, and management of UNM on iTunes U. Responsibilities include the design of an UNM on iTunes U's web site (itunes.unm.edu), motion graphics for video content, the layout of UNM iTunes U on the iTunes application & iOS devices, and the conversion of content for iTunes U.

OTHER DUTIES //

- Managed employees responsible for first-tier support with PawPrints and the computer labs & classrooms across campus. These individuals and I were responsible for the functionality of 1000+ computers (Mac & Windows), 32 printers, two multifunction devices, and 33 release stations on campus.
- Manipulating XML and JSON data for use in digital signage widgets and applications.
- Set up, provisioned, managed, and distributed tablet devices for classroom use via macOS Server's mobile device management (MDM) utility.

FEBRUARY 2010 - AUGUST 2012

Web Programmer

School of Medicine, Health & Health Sciences, The University of New Mexico, Albuquerque, NM, USA

KEY RESPONSIBILITIES

UNDERGRADUATE MEDICAL EDUCATION (UME) // Charged with the tasks of designing, building, and maintaining the web pages for the UME department. The design of these sites involves communicating with several divisions of UME, so that their individual vision can be expressed while maintaining a uniform feel with University of New Mexico web standards.

VIRTUAL HISTOLOGY & RADIOLOGY LABS // The Virtual Histology and Radiology Labs consist of various labs featuring images of microscopic cells and tissues, MRIs, and radiographs that can be zoomed in and labeled with points-of-interest. Tasked with bringing the Histology site up to date with a clean, intuitive design to surround the slide display applet. For Radiology, developed a virtual flashcard system for students, allowing one to hide/display labels on a given image.

IT USER SUPPORT // Duties included building custom computer hardware, imaging devices, and provisioning both end-user devices and managed environments via Group Policy and Active Directory. Also performed regular device set ups for student assessments administered through ExamSoft and in support of the Objective Structured Clinical Examinations (OSCEs).

NOVEMBER 2005 - MAY 2010

Web Programmer

College of Nursing, Health & Health Sciences, The University of New Mexico, Albuquerque, NM, USA

KEY RESPONSIBILITIES

COLLEGE OF NURSING // In charge of the primary web site for the University of New Mexico College of Nursing. The job required the design, development, and maintenance of the most-accessed image for the institution. Involved intense collaboration with faculty and staff to capture their vision while providing a unique experience among other University web sites.

THE NEIGHBORHOOD // Collaborated with Jean Giddens PhD, APRN, BC to design and develop a virtual, web-based community that served as a platform for the undergraduate concept-based curriculum. "The Neighborhood" served as a virtual world where nurses could apply real-world concepts to a fictionalized, but grounded, story of a community. This required the development of many website styles to make each part of the community feel unique – households, hospitals, newspapers (whose stories I wrote), and even a web site for a fictional mayor. Content would unlock on a weekly basis (using ColdFusion), so a student would become invested in the stories. The idea was conceived out of a recognized idea for nursing educational reform.

IT USER SUPPORT // Duties included building custom computer hardware, imaging devices, and provisioning both end-user devices and managed environments via Group Policy and Active Directory. Part of a team whose task was to design, construct, and install one of the College's first simulation labs.

NOTABLE ACHIEVEMENTS

- "The Neighborhood" went on to be sold to Pearson Education Publishing, who continues its development. "The Neighborhood" is still used today to train future healthcare professionals, helping them deepen their grasp of the patient experience, and leading to better clinical decision-making skills.

[Portfolio & Freelance Experience](#)

For screenshots, a detailed description, and more projects, please visit my portfolio at www.alexroessner.com.

[References](#)

To ensure the privacy of individuals, references are available upon request.