

Kevin Kane

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Software Developer - North Carolina Museum of Art Foundation (January 2022 – Present)

- Design and develop interactive applications that deepen context for collection objects within a large museum, reimagining its presentation of artifacts to broaden representation and narratives within in-gallery interactive media.

Programming expertise

HTML, CSS, JavaScript
Electron, Node.js
WebGL, GLSL
p5.js, Three.js
PHP, WordPress
Unity, C#
PowerShell
Bash
Python
GitHub

- Utilize web technologies, game engines, high-resolution imagery, 3D virtual representation, and video media to increase accessibility, educational insight, and creative inspiration across audiences, while focusing on ease of maintenance and modularity in software design philosophy.
- Focus on touchscreen applications to accompany exhibition programming. Collaborate with interpretation and design staff to plan content delivery and customize graphical UI to unify the look and feel of exhibition spaces.
- Develop within CMS frameworks to meet needs of staff and content, create custom REST API endpoints associated with CMS content.
- Support content viewing in multiple languages on all platforms, utilized when institutionally approved alternative language text is available.

Computer graphics expertise

Adobe Creative Suite
Blender 3D
Digital Photography
UX Integration

- Configure hosting for and deploy production code remotely to public web servers.

- Design local networks for use in on-campus gallery spaces.

- Implement operating system level automation in institutionally owned devices for ease of maintenance.

- Ensure systems pass and store authentication credentials by best-in-practice cybersecurity standards.

- Primarily utilize web technologies (HTML, Tailwind CSS, JavaScript, PHP, WordPress, Electron, Node.js, Three.js) and Unity (C#). Usage of Git, PowerShell, Bash, and Python as needed.

as well as
Server Administration
Networking
Web Technologies
Cloud Computing (Azure, AWS)

Digital Experience Strategist & Systems Administrator - North Carolina Museum of Art Foundation (August 2019 – December 2021)

Information Technology Technician - North Carolina Museum of Art Foundation (September 2018 - August 2019)

- Serve as a computing subject matter expert for the non-profit side of a large museum of art, providing direction for both internal information technology and public-facing creative technology initiatives that support the strategy and goals of the museum.

- Develop bespoke touchscreen applications to accompany exhibition programming. Collaborate with interpretation and design staff to plan content delivery and customize graphical UI to unify look and feel of exhibition spaces. Keep accessibility, educational goals, and ease of maintenance front of mind in software design.

- Lend technology expertise to planning and installation of three immersive experience rooms featuring seamless multi-channel floor-to-ceiling video projection and surround sound, each building engagement with museum visitors and bringing institutional recognition from museology societies.

- Assume a leadership role in large-scale information infrastructure projects. Cultivate and maintain technology partnerships, manage licensures for ongoing information services, plan periodic network topology revisions and tech requirements for new campus building. Negotiate contract agreements for fiber service, annual network vulnerability testing (penetration testing), cloud software packages, and the development of custom educational applications by third parties.

- Guarantee 24/7 uptime for on-premises IT infrastructure, including point-of-sale technologies, ongoing support for staff members, object management in Active Directory, a fleet of about 20 servers, 70 desktops, 30 printers, and network connectivity via 4 firewalls managing 12 VLANs

North Carolina State University

December 2017

Master's, Physiology (non-thesis)

Grad Certificate, Biomanufacturing

Teaching Assistant, Chemistry

GPA: 4.00/4.00

The University of North Carolina at Greensboro

December 2013

Bachelor of Arts, Psychology

Bachelor of Arts, Studio Art

Lloyd International Honors College

International Exchange at Yeditepe

University in Istanbul, Turkey

GPA: 3.98/4.00

across 30 switches, 2 physical wireless controllers with 50 access points, as well as a separate cloud-administered wireless network with 10 access points.

- Reduce operational overhead cost by implementing free and open source technologies, and developing custom scripts/software when possible. Employ Linux-based systems for network security monitoring and vulnerability testing, DNS filtering, FTP services, digital signage, and other media playback. Write and implement scripts that automate data transformation and backup, power maintenance of critical systems, and serve as custom alerting tools for uptime monitoring.
- Ensure all systems meet best-in-practice digital information security standards, including card payment compliance standards (PCI). Maintain vigilance for threats and vulnerabilities to integrity of critical systems, monitor phishing attempts, deploy patches, revise network segmentation, and isolate systems when necessary.
- Advise on advances towards an institutional strategy for expansion and preservation of digital artwork collection, consult with external digital preservation professionals to develop standard procedures for pre-acquisition assessment, handling, storage, presentation, and preservation of artworks containing computational components.

Talks

(forthcoming) American Alliance of Museums (AAM) 2023, *Creating Digital Interactive Labels for Art Museums*, Co-speaker with Felicia Ingram, North Carolina Museum of Art

(forthcoming) Museums and the Web (MuseWeb) 2023, *Best Practices for Developing Kiosk Style Interactive Touch Applications for Museum Spaces*, Speaker

(forthcoming) MuseWeb 2023, *Creating Digital Interactive Labels for Art Museums*, Co-speaker with Felicia Ingram, North Carolina Museum of Art

(forthcoming) North Carolina Museums Council Conference 2023, *Creating Digital Interactive Labels for Art Museums*, Co-speaker with Felicia Ingram, North Carolina Museum of Art

Southeastern Museums Conference 2022, *Introducing Technology into the Museum*, Co-speaker with Felicia Ingram, North Carolina Museum of Art, and Jacy Richardson, East Tennessee State University

MuseWeb 2021, *Technology and Museums during a Pandemic: Friend or Foe?*, Panelist with Felicia Ingram, Molly Trask-Price, North Carolina Museum of Art, and Emily Kotecki, High Beam Strategies

Southeastern Museums Conference 2020, *Fabricating Authentic Experiences with Virtual Reality*, Panelist with Michelle Harrell, Felicia Ingram, North Carolina Museum of Art, and Mike Cuales, Derek Alan Rowe, LEVR Studios LLC

Awards

MuseWeb 2020, Gallery, Museum, Library or Archive Interactive Award (GLAMi), Exhibition media or experience caption for *Casa Azul Immersive Room*

MuseWeb 2019, Gallery, Museum, Library or Archive Interactive Award (GLAMi), Honorable mention for *Step into the World of O'Keeffe*

Contractor, Pharmaceutical Equipment and Utilities - Biogen via Sequence QCS (February 2018 - August 2018)

- Reviewed engineering documentation for biochemical manufacturing equipment in a newly installed bulk fermentation and protein purification facility. Review centered around completeness and accuracy of piping and instrumentation diagrams (P&ID) and certification of quality of as-built components to American Society of Mechanical Engineers (ASME) Bioprocessing Equipment (BPE) standards.

Awards

Employee Recognition Award for Quality of Work on Biogen Contract

Intern, Validation and Technology Transfer - Xellia Pharmaceuticals (June 2017 – February 2018)

- Scientific support for new pharmaceutical product introduction to formulation, aseptic filling, and lyophilization facility for small molecule and biologic active pharmaceutical ingredients; generated scientific evidence for controlled state of manufacturing processes.
- Collaborated with global R&D team members and contracted laboratories to execute experimental protocols verifying transfer of manufacturing processes to Raleigh site to meet healthcare industry standards. Principally, authored final study reports to summarize data for FDA regulatory submissions, and protocol deviation reports to address when, how, and why experimental protocols were not followed with resulting impact to data integrity.

Teaching Assistant, Chemistry - NC State University Department of Chemistry (August 2015 - December 2016)

Courses Taught: CH 101 General Chemistry Recitation, CH 102 General Quantitative Chemistry Laboratory

- Lead weekly teaching laboratories and lectures of ~20 students, and individual tutoring for undergraduate chemistry courses; kept faculty aware of concerns among students, maintained semester gradebooks and issued final grades. Topics include theory and experimental methods in stoichiometry, atomic structure, spectrophotometry, acid-base chemistry, titrations, electrochemistry, and reaction kinetics.
- Prepared solutions, calibrated lab equipment, monitored student safety, and disposed of hazardous wastes, but most of all—cultivated an inspiring and fun classroom with my students.

Research Project Administrator - NIH via Susan Calkins, Ph.D. at UNC Greensboro (January 2014 - May 2015)

- Collected and managed experimental data in physiology (EEG and ECG), emotion regulation, and cognition with child and parent research participant dyads as part of a multi-site longitudinal research project in human development. Communicated status of site deliverables and resource allocation with senior scientists, coordinated laboratory team meetings, and generally kept the project on track.
- Managed project budget and provided accounting for all expenses on yearly ~\$200,000 federal grant.
- Learned Visual Basic to program computerized experimental task designed by postdoc on study.

Research Assistant - Attention and Cognition Lab via Michael Kane, Ph.D. (August 2013 - December 2013)

- Worked with Ph.D. candidates running experiments for their dissertation research. Met with test subjects to perform assessments of attention, memory, and problem-solving abilities, notably as observed with and without interruptions.

Preservation Assistant - UNC Greensboro University Libraries (October 2010 - December 2013)

- Designed and constructed archival enclosures for the preservation of library acquisitions, including books and sheet music, under the direction of the Preservation Services head.
- Repaired spines of older hardback books and repaired or replaced damaged pages.

Reference contacts are available upon request. *It is my etiquette to inform references that someone will be reaching out before sharing their personal information. I promise they are real people with real contact information. I just want to protect their privacy.*

Thank you.