

ALIYA RENEE KHAN

CONTACT

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EDUCATION

University of Michigan
B.S. Computer Science 2019
B.A. Anthropology 2019
GPA: 3.70/4.00
Anthropology in Major GPA: 4.00/4.00

SKILLS

FRONT END EXPERIENCE: JavaScript ES6, HTML, CSS
BACK END EXPERIENCE: C++, Python, C, ARM Assembly, Command Line, SQL
FRAMEWORKS, LIBRARIES, AND TECHNOLOGIES: Jinja2, C++ Standard Library, ReactJS
SOFTWARE: Autodesk Maya, ArcGIS, 3D Coat, GitHub, Slack, MeshLab, RealityCapture, Blender, Adobe Photoshop
LANGUAGES: English (Native), Spanish (Professional working proficiency), Japanese (Conversational)
COURSEWORK: EECS 485: Web Systems, EECS 370: Computer Organization, EECS 388: Computer Security, STATS 250: Statistics and Data Analysis, MATH 417: Matrix Algebra I, EECS 281: Data Structures and Algorithms, EECS 376: Foundations of Computer Science, ANTHRCUL 327: Medicine and Healing, ANTHRCUL 330: Culture, Thought, and Meaning, ANTHRCUL 272: Language and Culture, ANTHARC 282: Prehistoric Archaeology, ANTHRCUL 201: Biological Anthropology, ANTHRCUL 202: Ethnic Diversity in Japan, ASIAN 325: Zen Buddhism, SAC 376: New Media, EECS 481: Software Engineering
OPERATING SYSTEMS: Linux, MacOS X
OTHER SKILLS: Analytical Writing, Research, Public Speaking, Data Analysis, Critical Medical Anthropology, Museum Research, Digital Archaeology, DSLR Photography, Blogging, Social Media, Teaching/Tutoring, Marketing

RELEVANT EXPERIENCE

Ruthven Museum of Natural History Museum Technician

Ann Arbor, MI
Jan 2018 to Current

- Responsible for creating fifteen short animation clips using Blender and MeshLab for use in new exhibits.
- Works with other undergraduate students to create three-dimensional photo models of fossils and artifacts. These models are used in educational animations as well as for academic research.
- Model creation requires using a DSLR camera to take pictures of the artifacts from several angles, compiling the pictures using RealityCapture software, and further editing the models in MeshLab.

The Gabii Project Research Assistant

Ann Arbor, MI and Rome, Italy
Sep 2015 to Apr 2017

- Used ArcGIS to map an archaeological site located outside of Rome, Italy
- Worked with 3D Coat, PhotoScan, and the Unity Gaming environment to turn photographs taken of the site into a user-friendly, three-dimensional, interactive virtual models.
- Traveled to Gabii, Italy and received direct training in photogrammetry, 3D modeling production, and archaeological topography. Processed over fifty three-dimensional models for final publication.
- The published 3D environment will greatly influence how archaeological information is recorded by preserving a visual representation of the artifacts and structures in their original context.

ID Tech Camps Instructor

Ann Arbor, MI
Jun 2017 to Aug 2017

- Taught a variety of intensive one-week courses involving topics such as introductory C++, assembly, Python, building a laptop using a Raspberry Pi and 3D modeling and animation in Autodesk Maya.
- Catered towards a variety of age groups and individual needs of children ages 7-17, helping over fifty students total create substantial working code or models.
- Taught Tynker, an introductory coding language designed for young children aged 7-9, for two of the eight weeks.
- Developed engaging and instructive lesson plans and activities for students.
- Organized and led several educational activities including museum tours and design challenges.

PROJECTS

Personal Website

- Adapted html5up design templates using knowledge of HTML and CSS in order to fit personal needs.
- Organized projects, coursework, and writing portfolio in an aesthetic and user-friendly manner.
- Utilized Adobe Photoshop to edit photographs taken with a DSLR camera in order to further personalize the website.

Loop

- Volunteered with an Ann Arbor-based startup involving connecting locals to events they might be interested to in the area.
- Completed Google Web Analytics courses in Search Engine Optimization and Data Analysis
- Created a PHP script for the company website that generates a unique and descriptive slug for each event in the database so the individual pages in the database would be more likely to show up in a Google search.

EECS 485 Instagram Project

- Used Python and HTML with Jinja templates in order to develop a static website generator.
- Created a server-side dynamic site using sqlite3 with Python. The functionality of this server site mirrored the actual Instagram application, with the ability to add and delete users, login, follow and unfollow, and like and unlike posts.
- Added client-side dynamic functionality using REST APIs and react.js in order to develop a web application that would update pages using JavaScript rather than server-side techniques.

EECS 481 Open-Source Project Contribution

- Contributed to the Zulip open-source project on GitHub by increasing test coverage of part of the application.
- Communicated with lead developers on the Zulip messaging platform in order to address several bugs and concerns discovered through the testing process.
- Identified an issue with the version of pip used in the development process that was preventing unit tests from running. Communicated this issue with the lead developers.
- Performed unit and integration tests on the changes made in the software.
- Wrote an extensive report explaining requirements elicitation, quality assurance, and communication techniques throughout the contribution process

ACTIVITIES

College Fashionista Community Member

Posts fashion-related photos on Instagram and completes online training modules on Photoshop, fashion marketing, and blogging.

Kappa Theta Pi Professional Technology Fraternity

Participates in monthly meetings, professional development, and tech-related events. Has given two presentations about digital archaeology a

Eta Kappa Nu (Electrical Engineering and Computer Science Honor Society)

EECS 183 Grader

MOSAIC (Stockwell Hall Multicultural Council) Secretary 2016-17

UROP Program Research Presentations

UROP Symposium Winter 2016, Department of Classical Studies Research Symposium Winter 2016, International Institute Award Grantee Symposium Fall 2016, International Institute Award Grantee Panel Winter 2017

University of Michigan Women's Glee Club Webmaster 2015-17

Worked with Publicity Manager to promote events across campus, kept website updated

National Merit Scholar 2015

VOLUNTEERING

University of Michigan Museum of Art - Summer Research Intern
Ann Arbor, MI

Jun 2014 to Aug 2014

Arbor Hospice - Volunteer Care Provider

2014 to 2015