

Bayan Mashat

Software Engineer

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SKILLS

Programming Languages: Python, C++, C#, HTML, CSS, Javascript
Data Science: pandas, gensim, spacy, jupyter notebook, neo4j
Game Engines: Unity3D, Ink
Misc.: software documentation, game design & development, data cleaning

ACTIVITIES

UC Davis Game Development & Arts Club – Co-President

2017-2019

Organized weekly meetings, game jams, and workshops; connected professors with students to develop games for research and educational purposes

Computer Science for Kids (CS4K) – Volunteer

2015

Taught coding and making games with Scratch MIT to elementary school kids in both Davis and Woodland

Manara Research – Co-Founder

2013-2016

Co-founded a non-profit to prepare pre-college Arab students to participate in science fairs

EDUCATION

UNIVERSITY OF CALIFORNIA AT DAVIS

June 2019

Bachelor of Science in Computer Science

INTERESTS

Games, data, AI, emotions, stories, education, mental health, creative writing, & ballroom dancing

EXPERIENCE

Gallium Artistic Services | Team Proxi

Berkeley, CA

Aug 2018 – Sep 2019

SOFTWARE ENGINEERING INTERN – Data Science

- Built sentiment classifiers in Python to identify emotional state of a player's text input
- Scraped, cleaned up, and analyzed interviews of Will Wright (Creator of SimCity) in Jupyter notebooks
- Wrote scripts in Python to connect with API's to split Will Wright texts into 6 categorized concepts (activities, places, things, persons, moods, and times) defined in the game model as "memories"
- Built a graph database in Neo4j to create, store, and recall Will Wright memories using Cypher queries
- Iteratively designed Proxi-to-Player conversation to create novel conversational gameplay
- Led team efforts to select 10 famous people in the game to be recognized in Asia, Europe, and the US to support international game release and coordinated with historians to create backstories

Ranam Company

Boston, MA (remote work)

Jun 2017 – Feb 2018

SOFTWARE ENGINEERING INTERN – Game Development

- Implemented the user interface of a mobile game application to teach how to play songs in middle eastern instruments, using C# in Unity3D
- Implemented data manager and analytics system and connected it to firebase
- Implemented the Arabic localization text
- Conducted continuous quality assurance testing for MIDI song files in the app

University of California at Davis

Davis, CA

Mar 2017 – Mar 2019

PROJECT LEAD

- Acted as a liaison between course designer (Prof. Angelique Louie) and the team, shipping an online game in less than 10 months, offered in 9 UC campuses for 5 years, serving 300+ students
- Designed the concept of a 9-level educational top-down 2D role-playing video game in Unity3D to be used as supplementary assignments for the undergraduate course "Introduction to Research"
- Led a team of 8 students of programmers, artists, writers, and a composer, and guided game development to align with the course objectives

RESEARCH INTERN AT BETA LAB

Oct 2015 - Mar 2017

- Designed tools to support researching young students learn and develop through making
- Mentored students on how to use maker tools like laser cutters and 3D printers

PROJECTS

e{du}motion [Web App & Research Paper] 2017

Web app for tracking emotions, developed in HackDavis'17 and resulted in a published study about using mobile technology to understand emotion regulation in academic performance with Professor Naraine Yegiyani in D.I.C.E lab

Shadow Pan [Game] 2016

An expressive video game created using Scratch, about solving mental health problems through interactive conversations with animation characters. Showcased in UC Davis Annual Undergraduate Research, Scholarship & Creative Activities Conference '17

GOOPLAY [Game & Research Project] 1st place winner, Intel ISEF 2011

Designed & programmed an educational video game in Scratch for researching the effectiveness of using games for improving web-searching skills for children