

JESSICA LIU

Programmer

(832) 997-8591 •

jessica8liu@utexas.edu •

[linkedin.com/in/jessica-l-62b106223/](https://www.linkedin.com/in/jessica-l-62b106223/) •

<https://www.artstation.com/crab-milk> •

EDUCATION & SKILLS

UNIVERSITY OF TEXAS AT AUSTIN – Austin, TX

Bachelor of Science, Computer Science, May 2025

Relevant Coursework

- Operating Systems, Computer Organization & Architecture, Discrete Math, Statistics & Probability, Multivariable Calculus, Data Structures, Discrete Mathematics, Linear Algebra, Machine Learning, UI/UX Design

TOOLS & SKILLS

- Tools:** Visual Studio Code, Unity, Autodesk, Tinkercad, Blender, Gimp, Da Vinci Resolve, Photoshop, Inkscape, Adobe After Effects, Adobe Animate, Adobe Premiere, Microsoft Word, Excel, PowerPoint, Python, Java, C#, C, HTML, CSS, JavaScript, SQL
- Foreign Language:** French

AWARDS

- Houston Livestock Show & Rodeo Best of Show Artist 2017, 2018, 2020, 2021
- Congressional Art Winner 2019
- National Merit Finalist 2021

PROFESSIONAL EXPERIENCE

SOFTWARE DEVELOPER

Benchmark Labs, June 2022 – August 2022

- Engineered a sensor-based machine that tests the quality of petroleum and chemicals that reduce wax; joined by 2 other programmers and 5 chemical engineers to produce accurate results.
- Led the development of Python software to automate data capture and visualization reports for company clients, increasing company productivity by 20%.

COMPUTER ARCHITECTURE TEACHING ASSISTANT

University of Texas at Austin Computer Science, January 2023 – Present

- Instructed a section of 20+ students to provide a better understanding of C, assembly code, and pipelining.

FASHION DESIGNER

BLKPWRC – Black Power Clothing, May 2021 – Present

- Designed clothing lines based on racial equality for the fashion brand, increasing clothing sales by 30%.

CHARACTER ILLUSTRATOR

The Kobold Press, April 2021 – December 2021

- Illustrated 6 characters for Kobold Press's Empire of Ghouls campaign with a quick turnaround time.

PROJECTS

PINTOS DEVELOPMENT – Lead Developer, August 2022 – December 2022

- Expanded a toy OS to include priority scheduling, argument passing on the stack, system calls for user programs, virtual memory, and converted the existing single-thread file system into an multilevel indexed file system.

HUFFMAN ENCODER ALGORITHM – November 2021 – December 2021

- Independently developed a program that losslessly compresses and decompresses files within 2 weeks.

FIREFLY UNITY GAME DEVELOPMENT – Project Leader & Programmer, September 2020 – April 2021

- Led development of 3D open-world game where players are a firefly; coded in C#.
- Implemented the 3D physics engine, ray-tracing mechanics, lighting system, and player controls.
- Built and trained an AI NavMesh system onto map to incorporate Enemy AI.
- Illustrated characters for 3D modeling, animation, and scenery assets,

TO SAVE A SOUL – CREATE WITH CODE UNITY JAM – October 2020

- Cooperated with international programmers and game developers to create a top-down isometric game in 3 days about Greek myths.
- Coded enemy ray-tracing detection and player controls in C# and illustrated player and enemy animations, tile sets, background assets, and screens; ranked among the top 10 games out of 100.

CHARITY ART COMMISSIONS – September 2021 – Present

- Raised \$2,000+ in charity commissions to AAPI, Project Hope Ukraine, and the Trevor Project through engaging artwork.

EXTRACURRICULARS

D.I.V.E (DISCOVERY, IMMERSION, VISUALIZATION, & EXPERIENCES) – Member, September 2022 – Present

- Pioneered ways to engage audiences with immersive experiences along with like-minded individuals with new VR technology and software.

ELECTRONIC GAME DEVELOPERS SOCIETY – Member, April 2021 – Present

- Participated in open-source game projects with hundreds of other programmers and game jams.
- Developed free tile-sets & character animations for members to use.

CURRENT CHANGE – Lead Programmer & Website Developer, July 2020 – July 2021

- Programmed a credible research website regarding current issues with a team of writers and junior programmers.
- Used HTML, CSS, and Inkscape to design an appealing UI, increasing readership by 13%.