JESSICA PENG

4006 Spruce St., Apt. 2, Philadelphia, PA 19104

🌐 jessicapeng.net   in /jess-peng/   ⦿ /jesspeng   ✉ jesspeng@seas.upenn.edu   📱 (412) 807-0062

Education

University of Pennsylvania, School of Engineering & Applied Science | Philadelphia, PA
Candidate for B.S.E. in Digital Media Design (Computer Science/Computer Graphics) - GPA: 3.20/4.00   May 2019

Coursework
Programming Languages & Techniques II, Data Structures & Algorithms, Computer Systems, JavaScript, Data and Information Visualization, Advanced Computer Graphics, Interactive Computer Graphics, Mathematical Foundations of Computer Science, Linear Algebra

Experience

The New York Times | New York, NY   June 2018 - August 2018
Graphics Intern (VR/AR) - Immersive Platforms Team, Graphics Desk
  • Researched and scripted a 3D visual of a particle explosion in Maya using JSON data for an upcoming science article
  • Prototyped 3D models and photogrammetry assets on iOS using Maya, SceneKit, ARKit, and Sketchfab to visualize AR moments
  • Performed R&D on the Microsoft Hololens to explore future mixed reality capabilities with volumetric video in immersive articles
  • Received credits in the development of two high-profile articles including "How We Created a Virtual Crime Scene to Investigate Syria's Chemical Attack" and "Step Inside the Thai Cave in Augmented Reality"

The Daily Pennsylvanian | Philadelphia, PA   August 2017 - Present
Interactive Web Developer - Projects Department
  • Design and develop front-end and back-end features of special projects pages for Penn's independent student news organization
  • Build 2D browser games in JavaScript as a branch of the Web Development Team including a Joe Biden infinite runner game (ongoing)

Molex | Lisle, IL   May 2017 - August 2017
Product Management Intern - Power Signal Business Unit
  • Spearheaded the production of all 2D/3D graphics and marketing assets for the FiT Families, a new line of power connectors
  • Developed virtual/augmented reality visuals for web and mobile applications to drive the use of emerging technologies in marketing
  • Photographed, edited, and tracked over 1,000 products for the global Molex web page saving the company over $90,000 in costs

University of Pennsylvania | Philadelphia, PA   January 2017 - May 2017
CIS 110 Teaching Assistant
  • Held office hours for 4 hours per week and graded assignments and exams for the Introduction to Programming in Java course
  • Guided students in solving programming problems efficiently and learning basic concepts such as linked lists, recursion, and sorting

Skills

Concepts: Object-Oriented Programming, Functional Programming, Web Development, VR/AR Prototyping, Graphic Design
Technologies & Applications: WebGL, OpenGL, Unity 3D, Microsoft Visual Studio, Qt Creator, SceneKit, ARKit, Xcode, Maya, Mudbox, MotionBuilder, Illustrator, Photoshop, After Effects, Premiere Pro, Dreamweaver, KeyShotVR, Sketch, MapBox, ArcGIS
Languages: Java, C++, C#, HTML/CSS, JavaScript, jQuery (*Familiar with:* C, Python)
Frameworks & Tools: Bootstrap, Three.js, Node.js
Version Control: Git

Projects

3-D Crossword (Team Project) | The New York Times Maker Week Hackathon   July 2018
  • Designed and developed a browser-based crossword game in a 3D environment using HTML, CSS, JavaScript, and Three.js
  • User interacts with the crossword by zooming in/out, panning, and rotating it with a touchpad
  • Additional features include auto-complete with music, auto-highlight, inline clue rendering, locking the y-axis, and a timer

Kessler Project (Team Project) | Walt Disney Imagineering Finalist   January 2018
  • Chosen as one of the top six teams from over 250 teams nationally to compete in the Walt Disney Imaginations Design Competition
  • Created a holistic themed experience where visitors can travel to outer space and explore relics of space history and exploration
  • Presented to managers and executives for a week at the Walt Disney Imagineering Headquarters in Glendale, CA

Rendering Engine | Advanced Computer Graphics   March 2018
  • Built a rendering engine from scratch using C++, Qt, and OpenGL that supports naive, direct/indirect lighting, and photon mapping renders
  • Users can load customized OBJ files into the application and run the renderer

Dining Guide (Fall 2017 & Fall 2018 Edition) | 34th Street Magazine   October 2017, September 2018
  • Designed and developed the magazine's annual dining guide featuring editors' picks of restaurants around Philadelphia using HTML, CSS, JavaScript, Bootstrap, Mapbox, and the Rellax library

Activities

Society of Women Engineers
Technology Director   January 2018 - Present
  • Re-design the existing organization web page and coordinate hackathons and technology events with company representatives
Corporate Dinner Committee Co-Director   January 2017 - December 2017
  • Coordinated SWE's largest networking event of the year comprised of over 150 attendees including students and representatives

*Also a member of: Women in Computer Science, The Daily Pennsylvanian, and Alpha Phi

Hobbies & Interests: long-distance running, painting, baking/decorating cakes, U.S. Presidents trivia