Catherine Yang

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EDUCATION

University of Pennsylvania, School of Engineering and Applied Science   Philadelphia, PA
Candidate for Bachelor of Science in Engineering, Computer and Information Science Department   May 2019
Major: Digital Media Design, *Minor*: Fine Arts
Cumulative GPA: 3.52/4.00
Coursework: Advanced Computer Graphics, Computer Animation, Procedural Computer Graphics, 3D Computer
             Modeling, Digital Figure Modeling, Software Design, Data Structures & Algorithms, Programming
             Languages & Techniques, Mathematical Foundations of CS, Computer Systems & Networks

SKILLS

Programming Languages: *Experienced:* Python, Java, C++ C#, JavaScript; *Familiar:* C, OCaml, HTML/CSS
Software: Maya & Arnold, FileMaker Pro, Shotgun, PyQt, Git, Unity, Photoshop, Illustrator, Premiere Pro, ZBrush

PROFESSIONAL EXPERIENCE

Nickelodeon Animation Studio, Burbank, CA   Jun 2018 – Aug 2018
Animation Technology Intern
- Worked with Animation Technology team to support animation productions, customize tools and databases
- Developed and customized Python tools for 2D and CG productions, including Shotgun action to copy delivery files
  to servers, PyQt tool to record lists of files, Shotgun plugin to push metadata to database
- Created FileMaker dashboard to centralize access to FileMaker systems and related Python scripts and Shotgun
  records, used dashboard to troubleshoot workflows
- Updated Python modules used in production and wrote extensive unit tests

Paramount Pictures, Hollywood, CA   Jun 2017 – Aug 2017
Worldwide Technical Operations & Servicing Intern
- Developed and tested newly launched screener site and corresponding iOS and Android mobile apps
- Spearheaded independent projects to improve screener site, including organizing thousands of site users and
  optimizing processes to manage growing number of users and site content
- Assisted team with servicing requests and processed weekly requests between team and platform developers

Moelis Access Science, The Netter Center, Philadelphia, PA   Aug 2016 – Jan 2019
Computer Science Fellow
- Teach computer science concepts to twenty 11th and 12th grade students at West Philadelphia High School
- Develop curriculum weekly by preparing Scratch, HTML, and Python activities, such as Asteroids game

PROJECTS

Computer Graphics, Physically Based Rendering, Spring 2017 & Spring 2018 Courses
- Built Monte Carlo path tracer, photon mapper, and ray tracer using C++ and OpenGL
- Wrote library of 3D linear algebra classes and created rasterizer for drawing scenes using C++

Programming Languages and Techniques, Spring 2016 & Fall 2016 Courses
- Programmed Mario game using Java Swing GUI framework and implemented Space Invaders game
- Built spell checker and internet chat server with Java, simulated piano using computer keyboard
- Practiced test driven development using JUnit testing framework

Software Design/Engineering, Spring 2018 Course
- Developed Android version of When2Meet in team of 4, while practicing Agile development, Git, UI design

Art, Design, and Digital Culture, Spring 2017 Course
- Created animated short using Photoshop & Premiere, designed abstract visualizations of sounds in Illustrator
- Constructed wearable headpiece out of paper using processed Philadelphia and LA weather data

ACTIVITIES

Women in Computer Science, FemmeHacks Marketing Committee   Aug 2018 – Present
Alpha Omega Epsilon Engineering Sorority, Member   Jan 2017 – Present
Penn Women's Ice Hockey, Left Wing   Aug 2016 – Jan 2017