# YANWEN (IVAN) XU

641 Merrill Rd, Santa Cruz, CA 95064 \$\displaystyle (510) 213-2303 \$\displaysu83@ucsc.edu \$\displaystyle https://people.ucsc.edu/~yxu83/

# **EDUCATION**

# University of California, Santa Cruz

September 2020 - Present

Master of Science in Computer Science and Engineering

· Relevant Courses: Compilers Design, Formal Method.

#### University of California, Santa Cruz

September 2016 - June 2020

Bachelor of Science Double Major in Computer Science and Computer Game Design

3.71 / 4.0

- · Honors/Awards: Dean's honor; Ambitious Summer Award; Winner of 2018 UCSC ACM Hackathon.
- · Relevant Courses: Computer Graphics, Type Systems, Artificial Intelligence, Game Design.

#### RESEARCH EXPERIENCE

#### Augmented Design Lab, UCSC

May 2019 - Present

- · Researched on behavior tree approaches and social force model for pedestrian simulation in autonomous vehicles testing.
- · Developed Unreal Engine plugins to procedurally generate testing scenarios and dynamically spawning navigation meshes for autonomous vehicles testing. The work is integrated into *CruzWay* and was published to IEEE IV.

#### **PUBLICATIONS**

· Ishaan Paranjape, Abdul Jawad, **Yanwen Xu**, Asiiah Song, Jim Whitehead (2020). A Modular Architecture for Procedural Generation of Towns, Intersections and Scenarios for Testing Autonomous Vehicles. *IEEE Intelligent Vehicles Symposium (IV) workshop*.

#### WORK EXPERIENCE

# Xiaomi Interactive Entertainment, Beijing

July 2017 - August 2017

Game Operator Intern

· Assisted maintaining the database of Xiaomi's App Store.

# IBM (China) Institute of Government Innovation, Beijing

June 2016 - July 2016

- Marketing Intern
- · Participated in survey interviews of colleges and universities, enterprises, and training organizations, analyzed contents and wrote reports.
- · Conducted independently case studies of collaboration between universities and enterprises, and wrote up reports of the findings.

# **SKILLS**

**Programming languages**: JavaScript, C++, Rust, Python, C#, Elm, Ruby and more.

Engines/Frameworks: Unity, Unreal Engine 4, MonoGame, Node.js, React/Redux and more.

GitHub page: https://github.com/xuyanwen2012