

# Shih-Tsui Kuo (Ariel)

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## LANGUAGE

Java  
C#  
C/C++  
Python  
HLSL  
JavaScript/TypeScript  
Ruby  
Unix Shell Script

## SOFTWARE/TOOL

Autodesk Maya  
Unity  
Adobe Photoshop  
Git/P4V  
Amazon Web Services  
Houdini

## RELEVANT COURSE

Computer Graphics  
Simulation for Animation  
Animation Art and Tech  
Effect Designs for Game  
Linear Algebra  
Differential Equations  
Algorithm

## EXPERIENCE

**High Moon Studios – Activision Blizzard, Carlsbad, WA** April 2020 – Present

**Technical Artist** – *Call of Duty: Black Ops Cold War, Call of Duty: Vanguard*

- Game performance analysis and optimization
  - Created lighting inspection tool to find overlapped light sources
  - Wrote tools to batch update asset properties to improve performance
- Wrote HLSL shaders for post effects: motion blur, vintage CRT effects
- Game mechanics scripting, art team scripting support and troubleshooting.

**Amazon Game Studios, Seattle, WA** April 2018 – Mar 2020

**Software Engineer** – PC Game Distribution Platform

- Build desktop application local backend in C# and GUI in Typescript
- Maintain game distribution service in JAVA
- Design and build in-game-purchase infrastructure and SDK

**Amazon Web Service, Seattle, WA** July 2016 - April 2018

**Software Engineer**– GameLift, Cloud Services for Game

- Built service that help game developers to deploy, scale and manage their game servers in cloud and provide low latency player experience

**Carnegie Mellon University, Pittsburgh, PA** 2015

**Teaching Assistant** – Building Virtual World

- Taught fundamental 3D modeling/rigging/animating in Maya.
- Troubleshot technical problems from creation in Maya to integration in Unity.

**National Chiao Tung University, Taiwan** 2013

**Teaching Assistant** – Algorithm, Computer Science School

- Assisted after-class discussion, handwriting assignment and algorithm implementing assignments in C/C++.

## HONORS and ACTIVITIES

- Judge/Mentor of Twitch Extension Hackathon in Yale University, CT 2019
- Amazon Summer Intern Hackathon 1<sup>st</sup> Place, Seattle, WA 2015
- Google Anita Borg Memorial Scholarship, Taiwan 2014

## ACADEMIC PROJECTS

**The Drop – a first-person shooter rhythm game, CMU, Pittsburgh, PA** 2015

- Implemented gameplay in C#, wrote CG shader in Unity.

**Fishbowl—a 3-minute animation short, CMU, Pittsburgh, PA** 2016

- Create fluid/smoke simulation and cloth simulation in Maya

## EDUCATION

**Carnegie Mellon University, Entertainment Technology, Pittsburgh, PA**

M.S. in Entertainment Technology 2016

**National Chiao Tung University, Computer Science, Taiwan**

B.S./M.S. in Computer Science 2012, 2014