# David Yu

#### Experience

Software Engineer, Visual Concepts (2K Games), Novato, CA

06.2013 - present

- Shipped titles: NBA 2K14, NBA 2K15, NBA 2K16, NBA 2K17.
- Owned complex player editor UI.
- Extended player editor to implement arena and team branding editors
- Provided API for engineers to implement player uniform and team staff editors
- Designed and implemented dynamic animated camera system for editors
- Co-led effort to refactor mouse system implementation and workflow for PC port
- Co-maintained and extended internal UI authoring tool
- Maintained internal shader material editing tool

## Visualization, Maple SDN

2014 - 2015

• Prototyped and maintained web-based visualization tools for an SDN controller

# Undergraduate Course Grader, Yale, New Haven, CT

Spring 2013

- Graded problem sets and midterm for Introductorion to Programming (CS112)
- Held office hours to assist students with programming assignments

## Software Engineer in Test Intern, Microsoft, Bellevue, WA

Summer 2012

- Implemented UI automation in C#
- Tested and delivered a quality feature of Windows 8 Ads in Apps
- Assisted with integration of new test framework into team workflow

#### **Projects**

Robinson: real-time forward renderer written in WebGL and TypeScript.

**GML**: vector math library for real-time applications in TypeScript, Haxe, and C++.

Slowpoke: raytracer in Haskell.

**Artemisx**: Haxe port of Artemis component entity system framework.

Sonar: networked multiplayer 2D SHMUP prototype in Haxe. Uses Artemisx.

All project source code available on github.com/davidyu

#### Education

B.S. in Computer Science, Yale University, New Haven, CT

2013

- Thesis advised by Richard Yang and Andreas Voellmy
- Advanced Topics in Computer Graphics
- Compilers and Interpreters
- Computer Graphics
- Computer Networks
- Operating Systems

## Coursework

LZW: compression/decompression utility using prunable hash tables in C

RockGen: Blender script for generating rock geometry using L-system and Voronoi noise

TCC: compiler for the Tiger programming language in Standard ML

Skills

Proficient in: C (99), Haxe, and TypeScript

Comfortable with: ActionScript, C++, Haskell, JavaScript, Lua, Python, Standard ML

Design: Flash, Illustrator, Photoshop, Blender Tools: Git, Perforce, Vim, Visual Studio

Interests

Basketball, competitive Overwatch, gameplay prototyping, game engine architecture