
Charles C. Brandt

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Github: <https://github.com/luftbuefel/>

STATEMENT OF PURPOSE:

To use my programming and creative skills to create exciting and innovative digital media.

EDUCATION:

Carnegie Mellon University:
Entertainment Technology Center,
Pittsburgh, PA, May 2006
Master of Entertainment Technology

College of William and Mary,
Williamsburg, VA, December 2002
Bachelor of Arts in European Studies,
Minor in Economics

SKILLS:

Unity, Unreal, VR/AR, Photoshop, Illustrator, Maya, Zbrush, Moho, ToonBoom Studio, Audacity, AfterEffects, Premiere, DaVinci Resolve, Voice acting, Tuvan throat singing.

LANGUAGES/Frameworks:

C#, Cg/HLSL, JavaScript, TypeScript, React, Node, Java, Python, C++, PHP, HTML5, AFrame, Three.js

Fluent in German; very proficient in Japanese; very proficient in Russian; proficient in Mandarin Chinese

AWARDS/HONORS:

2015 & 2016 JET Alumni Association grants for STEM projects

Speaker GDC China 2014: Speaker for Building Tools for Empowering Creativity and Improving Efficiency

2006 2 Telly Awards, Don on the Farm, 2D Animation

EXPERIENCE

Augmented Reality Engineer Consultant

CBS/Paramount San Francisco

June 2024 - Present

Setup live AR studios in Denver and Chicago for Unreal-based virtual production for weather reporting. Wrote React code to create dynamic content for controllers used by talent to trigger effects on a virtual weather map. Created CAD models and 3D-printed custom hand controllers for live broadcasts.

Virtual Reality Senior Software Engineer

SimX San Francisco, CA February 2020 - June 2024

Created over 100 virtual reality medical training scenarios with Unity for various platforms including the Oculus Quest and Focus 3 used by doctors and nurses around the world. Wrote shaders to improve visual effects.

Augmented Reality Engineer

Scrap Real Escape Game San Francisco, CA Nov. 2018 - Sept. 2019

Designed and created a Unity-based image tracking AR puzzle game. Built a networked system for controlling puzzle room video, audio, and lighting using an Android app created with Unity and C#.

Programming Instructor

The Coder School Fremont, CA November 2017- Present

Taught students how to program using C# / Unity, Python, and JavaScript. Created AR games for teaching image recognition, motion detection, color detection, etc. Taught classes for writing shaders for use in Unity projects. Built robots and physical sensors for game controls. Created video effects tutorials for computer vision that use a web camera as an input device.

Technology Professor/Advocate, Maker Club Founder

Shizuoka Board of Education Fuji, Shizuoka, Japan Aug. 2015 - Oct. 2017

Taught students how to create and program games using Unity. Created workshops to introduce technology topics to students using virtual reality, 3D printing/scanning, laser engraving, and video game/app creation.

Software Engineer

International Gaming Technologies San Francisco, CA Feb. 2012 - Aug. 2015

Worked on the Game Development Kit team creating a backbone system for connecting backend game logic to front-end Flash and Unity gambling games while keeping them secure in compliance with regional laws. Created a game agnostic tool for forcing outcomes to test and demonstrate game features.

Software Engineer

Crowdstar Inc. Burlingame, CA June 2011 - Jan. 2012

Created and modified code for a Facebook fashion game. Created content editing software to support the creation and modification of YAML files. Worked with artists on implementing UI elements for the game.