**Skills**

**Paul Merritt**

Boulder, CO

(310) 359-3021 (cell) hey@paulmerritt.me

**Computer Programming:** A-Frame, AR.js, p5.js, ML5.js, C#, Java, C++, C, JavaScript, Node.js, HTML5/CSS, Python, Processing

**Computer Skills:** Unity, Maya, Git, MQTT, MS Office, Adobe Premiere Pro, Adobe Photoshop, Audacity, OBS

**Languages:** Conversational Spanish

**Work Experience**

**NIST,** Boulder, CO **Augmented Reality Developer September, 2018-Present**

• Co-developed ARTV (Augmented Reality Tracking Visualization) which displays real-time tracking on 3D point clouds.

• Developed and co-developed several WebXR prototypes that stream IoT data via MQTT to an A-Frame scene display.

• Co-facilitated the CHARIoT Challenge, bridging IoT and AR industries towards improving a First Responder’s job.

• Using C# and Unity to build Augmented Reality (AR) programs for The National Institute of Standards and Technology’s (NIST) Public Safety Communications Research Division (PSCR).

• Creating and demoing POC-level training simulations for the Microsoft Hololens and Magic Leap One.

• Creating scenarios for the Vuzix Blade and iOS/Android to showcase the potential of AR in a variety of form factors.

• Constructing 3D models and their animations for the program.

• Working with local and distant Fire Fighters and Bomb Disposal experts.

• Presented demonstrations to attendees at CES 2019 and 2020, attendees at our Public Safety Stakeholders Conference, and visitors to our facilities in Boulder.

**City of Los Angeles ITA,** Los Angeles, CA **Software Development Intern May-August, 2017**

• Used C# and Unity to build an Augmented Reality (AR) program for the Information Technology Agency (ITA) as part of a project for the Los Angeles City Fire Department.

• Constructed 3D models and their animations for the program.

• Worked closely with the engineers at DAQRI, the AR headset company, during development.

• Collaborated with the City of Los Angeles QA team on testing plans.

• Presented demonstration to senior staff in the office of the Mayor of Los Angeles.

**ReviewInc,** Woodland Hills, CA **Software Development Intern June-July, 2015**

• Wrote several programs critical to the startup’s business workflow using C# in ASP.Net in Visual Studio 2013.

• Created Excel spreadsheet (.xls, .xlsx, and .csv formats) uploader for batch imports of client companies’ data.

• Developed program to collect spam or blacklisted email addresses and prevent their future use.

• Collaborated on UI functionality development and appearance improvements.

• Made unit tests for automated testing of the programs.

**Education**

**New York University,** New York, NY **May, 2018**

**Bachelor’s Degree:** Computer Science**; Minor:** Game Engineering

**Programming Projects**

**Java to C++ Transpiler** (Java, XTC, SBT) **September-December, 2016**

Group project implementation of a Java 7 to C++ transpiler for the Object-Oriented Programming (OOP) class. Written in Java using XTC libraries and SBT as a builder.

• Input: Java 7 source code with inheritance and virtual methods.

• Output: C++ source code without inheritance.

• Generate AST from Java source file, visit and mutate AST for C++ header, implementation, and main files.