

# Ulysses Popple

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VFX Technical Artist – London (UK and USA citizen)

**VFX:** Houdini (pyro, vellum, RBD, FLIP, Karma, USD/Solaris, PDG, HQueue, VEX), V-Ray, Fusion/Resolve, Unreal, Unity, rapid prototyping

**Programming:** Linux, Type/Javascript, Node.js, React, WebGL, Azure/AWS, Android

**Soft:** Team lead, project planning, live performance, documentation, client management

## *Selected Projects*

**Comedy Central / Piranha** / Clusterfest VR / Developer: [TouchDesigner](#) / [Node.js](#)

A VR experience in a booth at Comedy Central's Clusterfest.

- Created 15 second VR/webcam cuts from TouchDesigner recordings immediately following the user experience with an email turnaround of 5 minutes
- Use [lambdadesigner-js](#) with Node.js to coordinate recording, live scores, and game event triggering without lag

**HBO, Podop, Inside Secure** / Mosaic, Unreleased Prototype / Developer: [Android](#), Unity

Sole Android developer for Mosaic, an interactive narrative from Steven Soderbergh. The app lets users explore a branching episodic narrative along with small "discovery" snippets.

- Integrated a prototype DRM solution from Inside Secure into the video player. Worked with Inside Secure developers to improve a new version of their DRM plugin.
- Prototyped a 360 interactive narrative, [patent](#) co-invented with Steven Soderbergh and Ed Solomon

**SidLee** / Interactive Display / Developer: Unity

Kinect-Based interactive display with production-quality vfx in real-time

- Adapted a Navier-Stokes pyro solver to work in Unity's VFX Graph
- Mapped vendor-delivered characters and animations to live kinect skeletons and applied fire and smoke effects onto them

**Toyota, Saatchi & Saatchi, Wildlife.la** / #LetsJoinHands / Developer: [Cinder](#)

Interactive experience connecting Herald Square in NYC and Hollywood and Highland in LA where participants drew together with touch. The final video was uploaded to @Toyota's twitter page.

- Beautiful touch drawing and live video stream interface implemented in C++ and Cinder, with animated drawings, an OpenGL keyboard input, and Adobe After Effects animations.
- Led client demos on sight, and interacted with them directly to figure out their primary needs for the project

**US Air Force, Wildlife.Ia** / The Hangar / Developer: [Unity](#)

Created the “Tire Change Experience” where users loosened and tightened a tire with interactive screens and LEDs to get a high score. Created in Unity.

- Team lead for integration with the eShots api for all games with a custom Unity plugin and node.js app

**LambdaDesigner** / TouchDesigner in Javascript / Developer: [TouchDesigner](#), [Typescript](#), [Haskell](#)

A library that lets TouchDesigner users program TD networks in javascript

- Wrapped the entire TouchDesigner api in Typescript and Haskell with static and runtime typing
- Performed live in shows across Brooklyn and the world
- Led a workshop at the 2019 TD Summit teaching all participants to use the software

**Personality Quarks** / Python, C# / Developer: [Unity](#)

Reusable modular ML-Agent components for easily creating reinforcement learning agents.

- Led a workshop at the [International Conference of Live Coding 2020](#) teaching participants to create reinforcement learning agents
- Performed live with machine learning-trained AI actors

**HASH** / Remote Developer: [Three.js](#), [React](#), [Rust](#), [wasm](#), [AWS](#)

A web-based engine for running agent based simulations.

- Created a custom animation system for Three.js to allow massive visualizations on any machine
- Achieved increased performance and communication from five engineers by acting as engineer liaison between different parts of the product
- Laid out a six-month plan with time estimates for three engineers of a cloud-based simulation system capable of 22 million synchronized object mutations per second

**Trello** / 2013 - 2016 / Developer: [web](#), [Android](#)

A visual collaboration tool that came out of Fog Creek Software. Trello currently has over 50 million users across web, Android, and iOS.

- Managed biweekly to monthly releases, coordinating with a team of 3-4 engineers. Buildbot continuously built internal alpha builds, allowing us to have nearly daily deployments.
- Primary engineer for Trello on Android Wear and Google Nearby pre-release integrations. Worked confidentially with Google engineers during the development period.

## *Education*

**CGSpectrum** / 2021 - Houdini FX Diploma

**New York University** / 2013 - BFA Acting, Computer Science