

TYLER SHEPHERD he/they

CREATIVE TECHNOLOGIST · PRODUCT PROTOTYPER

Manchester / North West UK · jobs@cortezmcr.com · Selected work available on request

Creative technologist with 6+ years of professional engineering experience who turns ambiguous briefs into working digital products. I build interactive tools and performance instruments end-to-end — TypeScript/Python applications, real-time WebGL and audio, generative-AI workflows, Unreal Engine integrations and production infrastructure. My edge is the combination of creative judgement, rapid solo prototyping and the reliability discipline developed delivering national-scale public services.

CORE CAPABILITIES

Product prototyping: TypeScript, JavaScript, React, Next.js, Python, Flask, FastAPI, REST/WebSocket APIs, Electron, automated testing

Creative technology: WebGL, GLSL, Canvas 2D, Web Audio, Three.js, OSC, MIDI, NDI, WebSerial, 8th Wall WebAR

Real-time and AI: Unreal Engine 5 C++/Python, Blender, ComfyUI pipelines, PyTorch workflows, Gaussian splatting, local model tooling

Production engineering: AWS, Terraform, Ansible, Docker, Kubernetes/EKS, GitLab CI/CD, observability, Linux, technical documentation

SELECTED WORK

DITHER_DAW | *browser-based audiovisual performance instrument*

- Built a real-time audio engine with 3-band analysis, RMS/peak tracking, 3-class onset detection, LFOs and a modulation matrix connecting audio signals to visual parameters.
- Engineered 31 procedural Canvas 2D scenes and a 6-effect WebGL/GLSL chain, controlled through quantised performance pads and 6 live output/control protocols.
- Shipped a Gaussian-splat renderer with 20 audio-modulatable deformation parameters, roughly 8× .spz compression and real-time playback of 380,000+ points.
- Built DitherLink, a UE5 C++/Python plugin that maps OSC data to reactive lighting, mesh transforms and editor automation through Remote Control.

PROFESSIONAL EXPERIENCE

DevOps Engineer | DWP Digital

Manchester / Remote · July 2021 – 2026

- Delivered 4+ years of cloud infrastructure, automation and software delivery for national-scale public services used by millions of people.
- Built infrastructure-as-code and CI/CD across AWS, Terraform, Ansible, Docker, Kubernetes/EKS, Helm and GitLab, including promotion across 4 controlled environments.
- Operated Dynatrace and Prometheus/Grafana observability, investigated ambiguous incidents and wrote runbooks that made systems easier to support and hand over.

Independent Creative Technologist | CORT3Z Practice

Manchester · 2024 – present

- Designed and shipped 8+ experimental tools across live audiovisual performance, WebAR, generative image workflows, DJ-library automation and desktop music software.
- Built work from concept through interface, code, testing and deployment, using club culture and live performance as a real user-research environment.

L1/L2 Support Engineer (IT Apprentice) | The Hut Group

Manchester · August 2019 – June 2021

- Designed a staff support application that improved internal service discovery and won the 2019 THG Apprentice Award for Most Innovative Idea.
- Monitored a multi-site device estate, traced 1 anomalous foreign IP to an undocumented VPN test device and drove a clearer documentation policy.

OTHER BUILDS

Chrome Grimoire — dual-path ComfyUI image pipeline · masciiwear — 8th Wall WebAR wearable · GRIMOIRE v2 — Flask web app · Song Ladder — Electron desktop app · CrateTagger — Python DJ-library tool

EDUCATION AND RECOGNITION

Level 4 DevOps Engineer Apprenticeship, DWP Digital, 2021–2023 · Level 3 IT Technician Apprenticeship, QA / THG, 2019–2020

THG Apprentice Award — Most Innovative Idea, 2019 · Roundhouse Poetry Slam regional-heats semi-finalist