DAVID ROLLINSON

Technical Director (they/them)

davrc.me@gmail.com

London
Telephone → +44 7588 580080
Portfolio/Github → https://devushkabeam.dev
LinkedIn → www.linkedin.com/in/rollinson-david

I am a creative technology professional with 3 years' experience supporting and co-ordinating collaborative projects across feature film, new media and fine arts. My proficiency in programming and various DCC software enables me to enhance production pipeline efficiency through effective support, troubleshooting, debugging, and the development of automation and validation tools. My strengths communicating with cross-functional teams and project stakeholders have resulted in a proven track record of delivering solutions that meet production requirements and assist artists, whilst also documenting essential company knowledge and toolsets.

RELEVANT WORK HISTORY

- **Show TD for Animated Features | Jellyfish Pictures** – 08/2023 – Present.
  - ·Pipeline support troubleshooting and debugging bespoke pipeline toolsets, DCC software, project files, frames and assets, often assuming responsibilities requiring meticulous attention to detail and routinely hitting SLA targets via Jira ticketing.
  - ·Python tool development for automation and pipeline data validation: I created a tool using USD API and HOM to identify Houdini Solaris crash-causes on USD stage composition by locating primitives with incorrect attribute sizes between layers.
  - ·Shot and asset rendering optimisations, reducing farm load to hit bid targets across multiple shows: I investigated Karma renderer memory leaks, identified bugs in displacement shading and contributed to production-viable workarounds using Karma render settings.
  - ·Houdini SideFX developer liaison for the company; tracking, testing and reporting bugs in SideFX's production toolset.
  - ·1-on-1 on-boarding of new team-members, answering queries and informing of pipeline processes and tooling.
- **Freelance Creative Technologist | Southeast London** – 09/2022 – Present.
  - ·Audio-visual design and shader development using C++, Java, GLSL, Blender for installations and publications.
  - ·Production responsibilities; authoring treatments, speculative budgeting for projects circa £40k.
  - ·Full-stack engineer for Digital Arts platform affiliated with Goldsmiths Digital, using Next.js and PostgreSQL. Mentoring students in web design and development.
- **Artist Technical Assistant | The Beams, Centre for New Culture** – 02/2023 – 06/2023.
  - ·Assisting artists Kimchi&Chips and Rosa Menkman on '*Cyclops Retina: Light Barrier 2.4*'.
  - ·Calibration for light projections onto large-scale mirror array. Film editing in Premiere Pro, with graphics produced using Stable Diffusion, Blender, AE and OpenFrameworks, exploring 4D geometries and emergent technologies.
  - ·Equipment sourcing from local lenders and end-of-exhibition inventorying.
- **Creative Technologist in Residence | The Beams, Centre for New Culture** – 03/2023 – 06/2023.
  - ·*'Delta Functions'* public arts residency, involving talks and workshops for the public.
  - ·Designed custom shaders in GLSL and prototyped these as interactive artworks using Processing, Arduino & PureData.
  - ·Devised tech setup for and chaired hybrid on/offline symposium with industry professionals across 4 time-zones.
  - ·Developed new modes of engagement using OpenCV, network protocols & visual programming language scripting.

SKILLS AND TECHNICAL KNOWLEDGE

- **Languages:** Python, C++ , C#, GLSL, Javascript, Windows & Linux Command-line (Batch, Bash, PowerShell). Version control in Git.
- **3D Programming and Shaders:** using Openframeworks (C++) and GLSL. Systems integration: Kinect SDK, Ableton, Arduino, Sensors.
- **Blender + Houdini:** procedural shading, modelling and FX. Rendering in Cycles and Karma.
- **Industry Standard Tooling:** Pixar USD, SideFX Houdini, Autodesk Maya & Flow, Foundry Nuke & Mari, Unity, Adobe CC, Thinkbox Deadline, and Atlassian Suite.

EDUCATION

- **BSc Computational Arts | Joint Hons. in Creative Computing and Fine Arts.**
  First Class Hons. at Goldsmiths, University of London. Sample of classes taken: Critical Arts Studies, Machine Learning, Computer Graphics (GLSL), Digital Media Studies, Advanced Audio-Visual Programming, Physical Computing, Numerical Mathematics.
- **UAL Foundation Diploma in Fine Art | XD Pathway for Installation Design.**
  Full-marks Distinction at Hereford College of Art. Received 'College Award 2019' for Creative Originality & Outstanding Development.
- **A-Levels in Economics, Mathematics and Linguistics.**

PROJECTS

- **Designed an interactive liquid-sculpture work:** for exhibition, using Arduino electronics & custom audio plugin (C++).
- **Conceived a mini-portfolio of 8 browser-based ML artworks:** demoing ML models & systems: ml5.js, p5.js and TensorFlow.
- **Authored an essay for CLOT Magazine:** an arts-technology online publication. Article can be read here.
- **Exhibited public installation project:** interactive multimedia artwork, inc. woodwork, 3D printing, electronics, StyleGAN video, 3D programming using depth data from structured light camera. Shown at Bargehouse Gallery, Southbank '22.

INTERESTS
include electronics, ML creative applications, the built environment, electronic music & classical flute performance.