

# Aalok Sud

Creative Technologist & Computation Artist

[Aalok.space](http://Aalok.space)

[alksud@gmail.com](mailto:alksud@gmail.com)

Montreal | Toronto

## Skills

Tools: TouchDesigner · Max/MSP · Blender · Unreal Engine · Three.js / WebGL · React / Next.js · Python · Java · C++ · Adobe Suite

Practices: Creative Coding · Live Visuals · Environment Art · UI/UX Design · ML / Agentic AI · Web · Branding & Identity · Art Direction · Typography · Motion Graphics

## Experience

February 2026 - May 2026

### Innovation Lab Concordia University, Montreal - *Software Developer*

- Developed a PHP module extending FarmOS to interface with agricultural sensors
- Built and shipped a Flutter mobile app for managing FarmOS dashboards remotely.

April 2025 - September 2025

### hims & hers, Montreal - *Creative Intern*

- Set up an email marketing campaign, and increased Customer Acquisition by 5% within a month.
- Created Performance marketing Ad creatives for platforms like Meta and Google.
- Worked on Organic Strategy and Brand Identity

Freelance Contract 2023

### The Bhag Club, New Delhi - *Foundation Branding*

- Created and set up a foundational design system, branding, and logo.
- The brand scaled from 500 followers to 50k followers on Instagram since using the design system.

## Education

September 2022 - July 2026

Concordia University, Montreal - *BCompSci Joint Major in Computation Arts and Computer Science*

June 2023 - December 2023

Google, Coursera - *Google UX Design Certificate*

## Projects

2026

### Gensigils - *Live Visuals*

- Procedurally generated audio-reactive visuals, built in Three.js/WebGL for web and ported to TouchDesigner for live performance.
- Engineered a modular Web Audio API pipeline with frequency-band isolation for vocal, beat, and snare detection, custom GLSL post-processing shaders for threshold and color inversion effects, and real-time BPM calculation from uploaded audio

2025

### Cyberskin - *Wearable or Tangible Installation Art*

- Cyberskin is a glove with 4 bend sensors on the fingers and a 9-DOF sensor built on an Adafruit Flora that sends sensor data to MaxMSP.

- An ML regression-based algorithm translates motion into values for a synth built in MaxMSP

2025

### **Realtime Audio Metamorphosis - *Game or Interactive Experience***

- A post-human interactive experience where the player inhabits a memory-less organism navigating a brutalist landscape of recontextualized technology — motherboards and concrete rendered as ancient, inscrutable artifacts
- Designed a fully procedural soundscape in Unreal MetaSounds where four deconstructed music stems are distributed across the map as collectibles, with BPM, pitch, and datamosh visuals degrading dynamically as the player's health decays
- Built a custom Niagara particle system for animated butterfly flocks using AnimToTexture for vertex animation, alongside a cave system modeled in Blender with procedural displacement materials in Unreal

2025

### **Reflections - *Game or Interactive Experience***

- A first-person narrative game where the player inhabits the perspective of a ghost — story objects are hidden from the main world and only visible through mirrors scattered across the map
- Designed a dual-reality system where turning off lights inverts the world into a "dead dimension," allowing the player to interact with hidden objects and uncover the character's story
- Implemented the visibility system in Unreal Engine using blueprints to selectively render objects exclusively in mirror reflections

2024

### **ARKIV - *Interactive Digital Archive Platform***

- Built a full-stack digital archive platform with an interactive 3D globe interface using React, Node.js, MongoDB, and Mapbox GL
- Designed a brutalist UI with temporal connections between related map markers and a dual-pane upload interface with real-time marker placement
- Implemented a RESTful API for GeoJSON storage and retrieval, with Cloudinary integration for optimized image delivery

2024

### **5oundmachine - *Generative Sequencer & Sound Simulation***

- Designed a hybrid generative instrument combining a matrix sequencer, granular synthesis, and spatial audio simulation in Max/MSP
- Built an environment simulation engine applying reverb, filtering, and spatial panning to model real-world acoustic environments

## **Awards | Exhibitions | Performances | Collective**

September 2022 *Award*

Concordia University International Tuition Entrance Scholarship

January 2023 *Collective*

Computation Arts Student Society - *Outreach Officer*

2026 *Performance*

Live Visual for Droplets Collective

Live Coding for JenniCam@30 at Milieux

Realtime Audio Metamorphosis for Ludodrome 2026 at Parquette