Reyhaneh Danesh Doost

Textile Engineer & Computational Designer

Email: reyhanehdaneshdoost@gmail.com | Website: reyrove.github.io | GitHub: github.com/reyrove
LinkedIn: linkedin.com/in/reyhaneh-daneshdoost |

EDUCATION

B.Sc. Textile Engineering *2015–2020*

University of Guilan, Iran | GPA: 16/20 (3.2/4.0) | Thesis: "Polyurethane Foams & Industrial Applications"

RESEARCH INTERESTS

Generative Art | Computational Design | Human-AI Collaboration | Smart Textiles | Creative Coding | Web3 Technologies | Scientific Visualization | Interactive Media

GENERATIVE ART RESEARCH

> **60+ Algorithmic Art Collections** exploring mathematical patterns, computational aesthetics, and creative coding across blockchain platforms. Primary research in mathematical visualization and procedural generation.

fxhash | Objkt | Exchange.art | editart

- **Mathematical Series:** Fourier, Fibonacci, Bézier curves
- **Geometric Explorations:** Girih patterns, Triangulum, Spirograph
- **Computational Systems:** Game of Life, Sudoku, Fractals
- **Featured Works:** Wandering Eyes (Objkt), Celestial Frost Arcs (AI-assisted)
- **ASCII Art Research:** ASCII Body Series - Digital representation studies
- **Published Research:** Featured in Visual Art Journal, Issue 31

APPLICATIONS & WEB DEVELOPMENT

- **Sparrow Hawk CodeArt Generator** - AI-assisted generative art tool (Vercel/Groq API)
- **Sparrow Hawk News Sidekick** - AI-curated tech news dashboard (Vercel/Groq API)
- **Textile-verse Web Application** - Engineering calculation tools (JavaScript)
- **Gizmo Webbook** - Interactive AI-generated comic experience (JavaScript)
- **Baby Hawk Mantra Generator** - AI-powered inspiration soul (Vercel/Groq API)

PUBLICATIONS & DIGITAL MEDIA

- **Academic Publication:** Visual Art Journal, Issue 31 (pp. 18-19)
- **Technical Writing:** Medium, Daily.dev
- **AI Podcast:** AI Storytelling Podcast
- **AI Music:** AI-Generated Music
- **Educational Content:** YouTube (English) & YouTube (Persian)

TECHNICAL SKILLS

JavaScript/ES6+ | p5.js | React.js | HTML5/CSS3 | Python | Fortran | Node.js | Three.js | D3.js | OpenAI API | Git/GitHub | LaTeX | Material Studio | LAMMPS | Bootstrap | REST APIs | Data Visualization | Textile Engineering | Polymer Science | Generative Algorithms

PROFESSIONAL EXPERIENCE

Freelance Computational Designer & Developer
2019–Present

Developed custom web applications, AI tools, and educational content. Created interactive data visualizations and technical tutorials in Persian for engineering students.

Generative Art Researcher & Web3 Designer
2024–Present

Published 60+ generative art collections exploring mathematical patterns and computational aesthetics. Research in algorithmic art, blockchain platforms, and digital ownership models.

CERTIFICATIONS

- JavaScript Algorithms & Data Structures - freeCodeCamp
- Front End Development Libraries - freeCodeCamp
- Responsive Web Design - freeCodeCamp
- Data Visualization - freeCodeCamp
- Back End Development & APIs - freeCodeCamp
- Nanotechnology Applications in Polymers - IPM

AWARDS & RECOGNITION

- **Featured Artist on Objkt:** "Fibonacci Fourier" & "ASCII Venus" curated on homepage
- **"Hidden Gem" Selection:** "ASCII Grapefruit" featured by Exchange.art (May 2024)
- **Academic Publication:** Generative artworks published in Visual Art Journal, Issue 31
- **Platform Recognition:** 60+ collections across 4 major Web3 art platforms

RESEARCH METHODOLOGY

- **Computational Creativity:** Algorithmic exploration of mathematical patterns and generative systems
- **Human-AI Collaboration:** Co-creative processes integrating AI tools in artistic workflows
- **Material Science:** Engineering background applied to digital material studies
- **Cross-disciplinary:** Integration of textile engineering, computer science, and digital art
- **Open Source Research:** Public documentation and sharing of creative coding processes