

DAN DEGEEST

Creative Technologist • Full Stack Developer • Artist • Musician
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SUMMARY

Full-stack engineer and creative technologist with 30+ years of experience building scalable systems, developer frameworks, and user-facing tools—from enterprise SaaS to generative AI workflows. Recent HCI master's degree focused on user-centered design, rapid prototyping, and AI-augmented product experimentation. Experienced working across ambiguous problem spaces, leading cross-functional initiatives, and aligning technical direction with real-world impact.

CORE STRENGTHS

Generative AI: RunwayML, Krea, Replicate, Suno, MiniMax, OpenAI, CustomGPT, ML5.js

Rapid Development: Cursor, Colab, GitHub Copilot

Programming & Scripting: Python, JavaScript, C#, C++, Java, Node.js, Flask

Visual Tools: Processing, P5JS, Adobe CC, Cinema 4D, AfterEffects

UX Practice: User-centered research, prototyping, usability testing

System Design: REST APIs, AppEngine, Azure, SQL, microservices, ETL pipelines

Team Dynamics: Agile, mentorship, remote/hybrid collaboration

EXPERIENCE

Principal Software Engineer – DFIN

Remote/Hybrid • Mar 2021 – Jul 2023

- Led microservice development in Java/SpringBoot for SEC SaaS platform
- Mentored junior developers across time zones
- Collaborated with SMEs, UX, and marketing to define and deliver new features

Senior Software Engineer – Iowa DOT

Ames, IA • Jun 2020 – Mar 2021

- Developed Azure-based ETL tools using Task Parallel Library (TPL) and PLINQ
- Modernized development workflows with GitHub and Azure pipelines
- Created and documented REST APIs; mentored staff on best practices

Staff Software Engineer – Workiva

Ames, IA • 2009 – 2020

- Founding member of the R&D team behind Workiva's first cloud-native SEC compliance platform—led greenfield architecture and early-stage development of a high-scale, user-driven SaaS product

- Designed and implemented an SDUI framework powering 350+ SEC form types—balancing regulatory complexity with dynamic UI delivery
- Developed scalable backend services in Python on Google App Engine and rich client-side interfaces in FLEX, Dart, and React, all validated through user research and testing
- Collaborated with product, UX, and compliance teams to ensure usability, accuracy, and maintainability

SELECTED PRIOR EXPERIENCE (Pre-2010)

Senior Game Developer – Engineering Animation, Ames, IA (1996–1999)

Created 2D graphics engines and a custom scripting system for interactive games, including *Disney/Pixar's A Bug's Life*.

Senior Software Engineer – Pioneer Hi-Bred, Johnston, IA (2003–2006)

Built custom data visualizations and applications in collaboration with genetic researchers, increasing insight and reducing time spent on physical field trials.

Senior Software Engineer – iMed Studios, Ames, IA (2006–2009)

Developed interactive digital marketing tools and visualizations for pharmaceutical campaigns working closely with medical and sales professionals.

Other roles: Microsoft/WebTV, Rockwell-Collins, Snap2, Palisade Systems, Monsanto (available upon request)

RECENT PROJECTS

Resource Recovery Studio (Capstone Project, 2025)

Custom GPT-powered AI assistant and video generation workflow for sustainability education.

<https://drive.google.com/file/d/1C0QihN0Ry-5HGwpTZlHVnzQ3K09cpH7J/view?usp=sharing>

aMiRROrMySubconscious

Custom designed and fabricated interactive AI mirror installation using fine tuned LoRa diffusion model APIs and webcam input.

<https://github.com/dandegest/aMiRROrMySubconscious>

CTRL+ALT+DEplete

Environmental sculpture using electronic waste, Arduino, MIDI and programmatically generated audio sonification.

<https://github.com/dandegest/CtrlAltDeplete>

Resource Recovery EP

Concept album featuring original lyrics and music supported by generative AI music videos and live performances.

<https://www.youtube.com/watch?v=EbJkDrdE49U&list=PL4D8fienpAMBHagkbwmxoeWAeN6yCSBTE>

EDUCATION

M.S. Human Computer Interaction, Iowa State University, 2025

B.S. Computer Science, Iowa State University, 1994