JASON GERMAN

Creative Technologist / Autonomous Systems Developer / Illustrator

San Diego, CA | jasongerman@protonmail.com
github.com/mematron | mematron.github.io/portfolio | artstation.com/mematron | linkedin.com/in/mematron

PROFILE

Creative Technologist and Illustrator with more than 30 years spanning software, interactive systems, illustration, and physical fabrication, building things that learn and things you can touch. A traditional artist who paints, draws, and sculpts, and a programmer since 1982, when I wrote my first AI at 12 on a TI-99/4A; the art and the code have shaped each other ever since. Creator of ARMINTA, an autonomous agent that runs continuously, 24/7, and has passed 4 million steps; Integument, an interactive sci-fi microscope illustration released on Steam; and BIOS of Being, whose companion book is in the San Diego Central Library's permanent collection. Craft background at Apple and Paramount Pictures, from interactive tools to full-scale fabricated props and interfaces.

TECHNICAL & CREATIVE SKILLS

Creative & Interactive: Figma, Photoshop, ZBrush, 3D Coat, LightWave, real-time 3D animation, illustration, painting, drawing, sculpture, 3D printing, prop fabrication, hardware prototyping.
Autonomous Systems: Agent architecture, persistent memory, reinforcement learning, Q-learning, causal experimentation, genetic algorithms, Linux monitoring and automation, Ansible, PowerShell.
Software: Python, Java, JavaScript, C++, Objective-C, SQL, MySQL, SQLite, shell scripting, HTML5, D3.js.

INDEPENDENT WORK

Creative Technologist & Autonomous Systems Developer | Mematron
2012 - Present

- **ARMINTA:** Designed and developed a continuously operating autonomous causal discovery agent on dedicated Linux hardware, learning through empirical interventions and persistent memory. Live dashboard: mematron.github.io/arminta-status | github.com/mematron/Arminta
- Migrated ARMINTA across hardware and operating systems while preserving learned memory and revalidating causal knowledge.
- Surpassed 4 million empirical operational steps through continuous autonomous experimentation.
- **Wish Pipeline:** Engineered autonomous capability development through gap detection, shadow evaluation, evolutionary grading, AST-based code generation and validated runtime integration without mandatory human approval.
- **Paramorphic Learning:** Built my own meta-learning framework that unifies Q-learning, genetic algorithm hypothesis evolution, and emotional state modeling in a single feedback architecture. It drives SUKOSHI and informs ARMINTA.
- **Mosaic Core:** Built the modular core of Minuet, the system that became ARMINTA: a registry of capability modules with resource costs and scores, so the system can weigh what it can do and what it costs.
- **SUKOSHI:** Built a browser-native autonomous agent combining Q-learning and a genetic algorithm execution layer. ardorlyceum.itch.io/sukoshi
- **Integument:** Designed, programmed, and released Integument, a free interactive sci-fi microscope illustration on Steam (Java), with a $4.99 DLC, 'Integument – Database: Gates.' store.steampowered.com/app/2138990/Integument
- **BIOS of Being:** Created a free browser-based interactive simulation that treats reality itself as the operating system. Its $5 DLC is the 100-page Consciousness OS Manual (PDF); a physical copy of the manual was added to the San Diego Central Library's permanent collection. ardorlyceum.itch.io/bios

PROFESSIONAL EXPERIENCE

System Analyst | G.I. Bill Pay Service, Inc., Okinawa

2017 - 2020

- Ran the IT side of a monthly bill payment service for US military personnel overseas: wrote Ansible and PowerShell scripts for remote automation across 8 branches.
- Maintained the company website and its MySQL databases (queries, updates, and maintenance); built and repaired computers; tech support for customers and staff.
- Designed and deployed internal applications using PowerShell and Objective-C to automate operational workflows, reducing overhead 25% with 99% uptime.

Assistant Language Teacher | Kadena Junior High School, Okinawa, Japan | 2015–2016

English Teacher | Echo Kindergarten, Okinawa, Japan | 2016

Computer Programmer & Specialist | Apple, Inc.

2007 - 2014

- Joined as a Specialist at the 24-hour Fifth Avenue store, working the overnight shift; the overnight crew, nicknamed the iKnights (about 12 people), prepped the store for launches, and I built detailed scale 3D models of the store for product-launch planning.
- Acted as a jack-of-all-trades overnight iKnight: customer support and phone repair on the floor, plus network maintenance, Unix automation, and branded lock-screen applications redirecting store computers during events. Recovered data from failing drives with Unix tools, bypassing the Finder to copy files out before drives died.
- Increased sales by 15% with a new visual merchandising strategy for product launches; reduced shrinkage by 20% by improving retail fixture security.
- Designed and built web applications for iOS and macOS, with attention to performance, device integration, and usability.
- Collaborated across engineering and design on interactive tools and 3D data visualization.
- Shared technical knowledge with distributed teams on application performance, deployment, and hardware integration.

Production Designer | Algorythm Intelligence LLC

2011 - 2014

- Design for the overall look of an animated series; rendering of 2D and 3D sketches and models using traditional and non-traditional techniques.

Graphic Designer | Splat Ink

2006 - 2007

- Print and design production: operated large format printers; book binding, vinyl wrap installations, and signs wrapped on metal for restaurants.
- Designed in-store signage, menus, lookbooks and catalogs; laid out full books for publication and prepared press-ready files, adding bleeds and crop marks and fixing client files built in PowerPoint or Excel; recreated business cards with matched fonts; photo restoration and video editing.
- Built and maintained the company website and interactive websites for authors; custom palm cards and postcards for artists, hotels, and major brands including Macy's and Michael Kors.

Additional Experience | 1999 - 2007

- **NetSage / Finali** (2000): early helpful agents on the internet; **Levi Strauss, San Francisco** (2000–2001): designer, Red Tab / Silver Tab, boys and girls 0–20; freelance web development (2001–2002), including Kennel Kings (design + Miva Merchant payment system); network support at Peak Systems (2005–2006). Plus retail / support roles at Virgin Megastore, Starbucks, and Borders Books.

Concept Artist | Vision Scape Interactive

1998 - 1999

- Created mechanical vehicle and architectural environment concepts for PlayStation titles, including Jet Moto 3 and Twisted Metal 4.

Prop Maker & Designer | Paramount Pictures

1989 - 1998

- Designed and fabricated full-scale set pieces and mechanical props for film and television productions.
- Created a multifunctional touch-interface prototype for Star Trek in 1993.
- Worked across production departments to solve fabrication, material, and structural challenges.

EDUCATION & SELECTED RECOGNITION

Academy of Art University | BFA Illustration, 1994–1998 | 4.0 GPA

Featured speaker, The Next HOPE, New York City
Presented work involving real-time 3D animation and augmented reality.

San Diego Central Library – permanent collection
Physical copy of the BIOS of Being Consciousness OS Manual (the 100-page DLC book)