Project videos, clients and more:

<u>www.bard-designs.com</u> and <u>www.themuze.biz</u> (password: **community**)

Seeking: A dynamic reasonably fast paced creative environment designing custom hardware, software and mechanical designs on never-been-done-before startup projects that help better people's lives in some way where unique creative solutions are encouraged.

Hard Capabilities: Embedded systems, firmware (RTOS & bare metal), hardware design, iOS apps, MacOS applications, Windows Forms, C#/.Net, OOP & procedural programming, assembly languages, Digital Signal Processing, 2D image processing, PCB layout, UI design, OpenCV, OpenGL, CAD, server side content delivery & payment processing, prototype manufacturing, book editing, basic organic chemistry, videography & photography, bare metal server & SQL, Bluetooth (LE & BR/EDR) integration, sound effects, voice overs, trailer editing.

Soft Capabilities: Ground up project design and entire integrated hardware, software and firmware implementations, project management, excellent organizational skills (code implementation and project management), excellent communications, dynamic, high attention to quality and detail, high creativity and unique solutions, multi disciplinary systems integration, part sourcing, marketing, PR, customer service, high integrity, *always* learning.

Patents: Speech Synthesis: 5029213, 4805220, 5140639 [not under my name]; Copy Protection: 4849836; Electronic Gas Mask: 20230405257, 11738163, 20210154426; Performance Musical Instrument: D231510; Virus Shield: 62/969587, 62/984970; Dually: 63/267,099; Dozens of provisional patents.

Background Highlights: Director of R&D at a startup. Over 40 years of software, hardware and mechanical experience (began contracting at age 16). One of the first ever Mac developers. Built robot at 13. Several patents by 22. Self taught and very self motivated. Wide variety of experiences in project management, Windows (C#, .NET, Forms), iOS / tvOS / MacOS (Xcode / Swift / Objective C / Cocoa) software, C, PHP, MySql, various assembly languages, firmware development, UI design, 3D CAD, 3D printing, CNC, digital audio / DSP / speech synthesis / physical modeling synthesis, 2D & 3D image processing, digital and analog hardware design, PC board layout, mechanical design, 3D laser optics, sound effects / sound design, photorealistic 3D, video editing and production, 2D imaging.

First principles thinker. Excellent at conceiving of new projects and seeing them all the way through to completion with <u>high attention to quality and detail</u>. Love applying broad experience to projects. Love learning and working individually and with talented folks.

Hardware Tools: Spectrum analyzers, oscilloscopes, DVMs, signal generators, logic analyzer, power supplies, microscope, fine soldering, breadboarding, prototyping, bring-up.

Software Tools: Visual Studio, XCode, MPLab, KiCad, Keil/ARM µVision, Atmel/Microchip Studio, Segger Studio, Eclipse, MATLAB, SolidWorks CAD & Electrical, Fusion360, Photoshop, Final Cut Pro, RDWorks, Sigma Studio, nRFgoStudio, CrossCore Embedded Studio, CircuitStudio, Code Composer Studio, TI Codec Control, XMOS Studio, Raspberry PI, Arduino, Amadeus Pro, Github, Atlassian Jira & BitBucket, Crittercism/Fabric, LabView.

Miscellaneous: Creative arts, Wrote feature film screenplay, Leather work, Cofounder of Spiritual Cinema Group, Assistant at the 2001 Disclosure Project at the National Press Club in Washington DC, Drumming, Professional baking, Professional jewelry photography, CERT Member, KK6OEA, Sailing, Drawing, Fitness, Nature lover, Hiking.