Jim Wheaton   jim@harmonicsystems.net   707-292-0676

Objective: Contract work or part-time employment. Full-time job considered if the match is a good fit.

Education: B.S. in Philosophy, Program in Language and Mind, M.I.T. - Cambridge, MA

Skills Summary: Software Development (C, C++, C#, scripting languages), Agile development cycle, SVN, Git, HTML, css, some hardware IOT abilities; some exposure to sql databases. Usual computer skills (word, excel, email). MS VSCode and Visual Studio; Experienced with Arduino programming and hardware prototyping; Detailed domain knowledge of audio and music engineering. Managerial skills (board officer on 3 non-profits); Good communications and people skills.

Work Experience:

Sr. Software Engineer   **Audible Magic Corp. - Los Gatos, CA**
January 2000 to March 2023
Founding member of the core technology team. Worked on all aspects of the Audio Content Recognition system, from low-level audio DSP to customer facing Toolkits, programs, and APIs. Worked on many spin-off technologies within the company.

President   **Harmonic Systems, Inc. - Sebastopol, CA**
February 1992 to Present
HSI is my consulting services company. I create custom software and hardware projects for artists and musicians. Most of my projects involve Arduino microcontrollers and LEDs, but I have done coding web-site development and other projects as well. I can provide consulting services in a business-to-business fashion without need for W-2 employment.

Board Member   **Chimera Arts & Makerspace - Sebastopol, CA**
March 2015 to Present
Board Secretary. Involved in daily operations of the local Makerspace including setting up the infrastructure for members (Cobot) and classes (Eventbrite) and middle-ware for connecting 3rd party websites (Squarespace) plugins. Skills include 3D printing, Laser cutting, woodworking, and Arduino programming. Occasional teacher of Arduino classes.

Patents :   Author or Co-author on 9 patents:
Polyphonic Breath Controlled Electronic Musical Instrument (#5245130); Electronic Tone Generation by Detected Performance Gestures (#5288938); Sound Parameter Controller for Use with a Microphone (#5422956); Position Based Controller for Electronic Musical Instrument (#5541358); Musical Tone Generating Apparatus Utilizing Microresonator Array (#5569871); Content-Based Analysis, Storage, Retrieval and Segmentation of Audio Information (#5918223); Method and apparatus for creating a unique audio signature (#US7562012); Playlist generation method and apparatus (#US8972481); Method and apparatus for creating a unique audio signature (#US8086445)

Non-Profit Work:

President, The Charter Foundation (2008-2012)- Managed the assets and fund-raising program for the Sebastopol Independent Charter School (Waldorf K-8 program).
President, Analy Education Foundation (2012-2015) - Fund-raising organization for Analy High School - granted teachers and students money for alternative classes and educational materials.
Secretary, Chimera Art Space (2018-2023) (see above).
Elected Delegate to the California Democratic Party (ADEM from AD12, 2017-2021; AD2 from 2023-2025) - Attended statewide conventions to vote on party platform changes, and candidate endorsements.

Web Sites: Sites I have created for clients and for fun:
                    www.harmonicsystems.net (my company website)
                    www.lmntology.com (spell words out of the Periodic Table of the Elements)
                    www.elemeteva.org (Hebrew version of lmntology.com for Teva Pharmaceuticals)
                    www.chameleoninstrumentlights.com (focus on my interactive lights for musical instruments)
                    www.whatiloveaboutsebastopol.com (slide shows of subjects in my home town)
                    www.specialdaysfromyourbirthday.com (computation of alternative dates, e.g. your 10,000th day)

Public Art Projects:

        The Occupy Bench - Sebastopol - I designed and helped build a 14' diameter circular set of 3 benches that
        are installed in the Sebastopol town square. Contracted with the City of Sebastopol. In honor of the
        Occupy Movement of 2012. https://www.facebook.com/occupybench

        Meter Made - Santa Rosa - Collaborated with other artists and fabricators on a 12' high tower built out of
        100 old parking meters. Each meter had LED lights that lit up in patterns and responded to local
        movement with an IR sensor. Installation of solar panel system and work on software and wiring.

        The Bell Clock - Sebastopol - A public performance installation that will play non-religious musical themes
        in the form of bells or chimes at certain times of day or certain days of the year.
        http://www.harmonicsystems.net/bellclock

Licenses:

        HAM Radio Technician License: **KK6-LIV**

        Sebastopol City Business License: **#721** (expires 12/31/2023)

        CA State Sales & Use Tax Permit: **027-831676**