

Karl E. Fitzke

202 Rachel Carson Way
Ithaca, NY 14850

mobile: 607-280-8705
karl@karlfitzke.com

INTRODUCTION

- Audio and Electronic Engineer – thrives on applications in sound and music
- Adaptable generalist – broad range of abilities and interests
- Energetic, conscientious, works well with others and alone
- Mature – unique career of full-time electronics and audio experience spanning decades

OCCUPATIONAL SUMMARY

- Embedded hardware and firmware design – Pro Audio, Wi-Fi, Mobile Phone, Cryptography
- Board and chip level design
- Archival audio digitization, restoration, and preservation
- Live show and studio multi-track recording
- Live sound reinforcement

DETAILED EXPERIENCE

Cornell Lab of Ornithology, Macaulay Library of Natural Sound and Video, Ithaca, NY, 2008-present

- Archival process development and quality control
- Digitization studio and field recording system design
- Equipment calibration and repair
- Field recording workshop instructor
- Voice-over studio recording

Freelance Production Engineer and Studio Work (SOUNDSWELL), Ithaca, NY 2004-present

- Audio and video digitization and restoration
- Studio, live show, and field recording
- Live sound engineering for GrassRoots and Ithaca Music Festivals, Calf Audio, BSI Productions, Rongovian Embassy, and The State Theatre of Ithaca
- Independent small-scale live sound
- Video production and DVD authoring
- Radio advertising, audiobook, and music tracking; sound effect archiving for REP Studio
- Sound Engineering Committee Chair, Ithaca Unitarian Universalist Church, (2007-present)

Freelance Electronic Engineering Services, Ithaca, NY, 2003-2008

- Paper copier vending and control firmware debug, hardware design – Jamex, Lansing, NY
- Electronic design review services, Sky Scout – YAMCON/Celestron, Irvine, CA
- United States Patent application– Texas Instruments, Dallas, TX
- Personal Computer upgrades, problem diagnosis and repair, networking

Earlier Electronic EXPERIENCE, EDUCATION, and more Please see following page

Earlier Electronic Design and Development, 1984-2003

- Baseband WiFi VLSI, VHDL – Alantro/Texas Instruments, San Diego, CA, 2000-2003
- Custom Cell Phone Development Tools, Xilinx FPGA, JTAG, ARM Processor training – Commquest/IBM, Encinitas, CA, 1998-2000
- Networked Pro Audio Equipment, QSControl and Rave (Cobranet) product lines, Motorola Microprocessor and Motorola DSP – QSC Audio, Costa Mesa, CA, 1994-1998
- Secure Telephone and Satellite Terminals, Intel Microcontrollers, TI DSP, Xilinx FPGA, RSA Public Key Cryptography – RCA/GE/Lockheed-Martin, Camden, NJ 1984-1994

EDUCATION

BS Electronic Engineering, Rutgers University College of Engineering, Piscataway, NJ, 1984

- Coursework including digital electronics, digital signal processing, and communications theory
- Credited independent study of early digital audio applications
- Elective courses in music theory, 20th century music, sociology, management, and economics

Additional

- Various VLSI Design Training courses, Synopsys, 2000-2003
- Computer Science and Cognitive Psychology, Rutgers University, Camden, NJ, 1990-1993
- Sound system design and optimization training, Syn-Aud-Con, 2003
- Live sound reinforcement training, Syn-Aud-Con, 1995
- Recording internship at Rep Studio, Ithaca, 2004
- Continuing education multi-track recording studio coursework, 1985

OTHER INTERESTS

- Music – Improvisational, looper-based, guitar duo member; studio-as-instrument work
- Government and Business – Corporate Personhood and Media Consolidation
- Sustainable Living – Intentional Communities and Cohousing
- Cognitive science – Philosophy, Computer Science, and Human Factors
- Volunteer work – usually drawing upon audio engineering and mechanical abilities
- Childhood Education

PROFESSIONAL MEMBERSHIPS

- Audio Engineering Society (AES)
- Institute of Electrical and Electronic Engineers (IEEE)

PAPERS AND PATENTS

- AES Paper, authored with others - An Open Modular Architecture for Computer-Controlled Sound Systems, 1994
- US Patent, with others - Methods and Systems for Communicating using Symbols Associated with Multiple Time Durations, 2004

REFERENCES AVAILABLE UPON REQUEST