Kauê Werner

kaue.werner@gmail.com | kauewerner.github.io

EDUCATION:

Federal University of Santa Catarina (UFSC) | Florianópolis - Brazil

- ➔ Graduation in Mechanical Engineering (2007 - 2012)
- ➔ Master in Vibration and Acoustics(2013 - 2015)

WORK EXPERIENCE:

Laboratory of Vibration and Acoustics | UFSC - Brazil:

- ➔ Research assistant: Experimental and numerical analysis (2009 -2012)
- ➔ Teaching assistant: Vibration theory and experiments (2012 - 2013)
- ➔ Master research topic: Psychoacoustics/subjective acoustics (2013 - 2014)
- ➔ Research engineer: Cochlear implant signal processing (2015 - 2016)

Audio Information Processing | Technical University of Munich - Germany

- ➔ Research assistant (2016 - 2018): human auditory system models
- ➔ Teaching assistant (2017 - 2018): Technical Acoustics and Audio Technology

Hexagon - Free Field Technologies | Mont-Saint-Guibert - Belgium

- ➔ Application engineer (2018 - 2020): Validation, quality assurance and improvement of the Actran Software Suite for acoustics, vibro- and aero-acoustics; Support and customer training; Acoustic & Vibration consulting projects for different industries

Absolute Audio Labs | Rotterdam/Hilversum - Netherlands

- ➔ Audio software developer (2021 - 2024): DSP development, validation and tuning of audio SoC firmware applicable to earbuds and hearing aids

~/biodiversica | Brazil

- ➔ Software developer (2025 -): development, support, and dissemination of free software and open source solutions for the collection, monitoring, management and analysis of bioacoustic data from Brazil's different biomes

---

SKILLS:

Spoken languages: English (C1), German (B1), Portuguese (native)
Programming languages: Embedded C, Python, SuperCollider, Assembly, MATLAB, C++/C#
Measurement equipments: data acquisition systems, transducers and calibrators, oscilloscope, sound level meters, head & torso
Software: VS Code, Vim, Qualcomm MDE, Actran Suite, Unity, LaTeX tools, Inkscape

---

PUBLICATIONS:

Werner, K.; Seeber, B.U.: "MODELING THE BIMODAL LATENCY BEHAVIOR IN ELECTRICALLY STIMULATED AUDITORY NERVE FIBERS", Bernstein Conference, 2018, T72

Werner, K.; Leibold, C.; Seeber, B.U.: "INDIVIDUAL FITTING AND PREDICTION WITH A PHENOMENOLOGICAL AUDITORY NERVE FIBER MODEL FOR CI USERS". Conf. on Implantable Auditory Prostheses, CIAP, 2017, p. 92, M11b

Werner, K., Chiea, R., Cordioli, J. A., ; Paul, S. ;"ANALYSIS OF COCHLEAR IMPLANT VOCODER SIMULATION INCLUDING THE CURRENT SPREAD EFFECT IN THE PRESENCE OF BACKGROUND NOISE," in *Fortschritte der Akustik - DAGA '16*, edited by M. Vorländer, and J. Fels (Dt. Ges. f. Akustik, Aachen).

Werner, K., Vergara, E. F., Paul, S.; Cordioli, J. A.; TIMBRE ASPECTS OF RIDE CYMBALS: SOUND COLORATION ANALYSIS USING PSYCHOACOUSTIC MODELS AND SUBJECTIVE EVALUATION. *The Journal of the Acoustical Society of America*, *138*(3), p1936-1936, 2015.

Werner, K. ; Cordioli, J. A. ; ACOUSTIC RADIATION BY MEANS OF AN ACOUSTIC DYNAMIC STIFFNESS MATRIX IN SPHERICAL COORDINATES. In: *Internoise*, Innsbruck, 2013.