## **Aperçu**

Adeptly navigating the intersection of medical software development and regulatory compliance • Dedicated to harmonizing technical innovation with stringent quality standards • Skilled in communicating complex data and concepts to diverse stakeholders • Demonstrating empathy and effective engagement with a wide range of audiences

## **Professional Experience**

#### Comerge AG, Switzerland

- Project lead overseeing the development and regulatory compliance of medical software from idea to market (www.comerge.net and www.incremed.com)
- Management of a small team of software developers
- Interacting with different stakeholders including clients, investors, clinicians, consultants, a Notified Body, the FDA, and external suppliers
- Aligning software development efforts with quality and regulatory affairs:
  - Requirements engineering
  - Documentation of software architecture and design
  - Risk management and cybersecurity analysis
  - Planning and execution of software verification and validation
  - Updates and improvements to internal SOPs and templates
  - Participating in audits by the Notified Body

Junior Software Engineer ----- 9/2017 - 8/2018

• Development of a web-based business communication software in a cross-cultural team using agile methodologies

#### Hertig Visualizations, Switzerland

Scientific Visualization Specialist ----- 2016 - present

- Freelance work in scientific visualization, data visualization, infographics, and web programming (www.samhertig.com)
- Holding workshops on scientific visualization for universities
- Selected clients: ETH Zürich, EPF Lausanne, University of Basel, Stanford University, UC San Francisco, University of Lisbon

**Stanford University, USA** ------ 4/2015 - 12/2015 **University of California, San Francisco, USA** ------ 5/2013 - 3/2015

Postdoctoral Researcher

- Developed software for analysis of biomedical data (www.cgl.ucsf.edu/chimera)
- Teaching assistant for object-oriented programming in Python
- Awardee of a postdoctoral fellowship by the Swiss National Science Foundation

#### **Education**

PhD in Science, ETH Zürich, Switzerland ----- 3/2012

- Discovered a mechanism by which pathogenic bacteria can sense mechanical force using computer simulations of proteins
- Presented research at international conferences, secured grants for supercomputing resources, published research in high-impact, peer-reviewed publications, and granted one US patent

MSc in Physics, University of Bern, Switzerland ----- 5/2007

• Minor subjects: mathematics and astronomy

# Sam Hertig, PhD

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# **Areas of Expertise**

- Medical Devices & Regulatory:

   IEC 62304, IEC 62366, ISO 14971,
   ISO 13485, various
   software-related guidance
   documents (EU, MDR, FDA)
- Software: C#, JavaScript, AngularJS, Python, Git, basics of Java and SQL
- 3D & Data Visualization: Mixed Reality, Microsoft HoloLens 2, Unity3D, Three.js, D3.js
- Visual Communication & Graphic Design: Adobe Illustrator, Photoshop, basics of AfterEffects and Autodesk Maya
- Broad Knowledge of Science: physics, math, astronomy, biology
- Languages:
  - English (fluent)
  - German (fluent)
  - French (conversational)
  - Swiss-German (native)
- Teaching & Mentoring:
  - Industry: interns, apprentices, junior software developers
  - Academics : high school, undergraduate and graduate students

#### **Scientific Publications**

• Full list: www.bit.ly/2lGz5hp

#### Interests

- Electric Bass: www.tontopf.be
- Photography: www.bit.ly/3yys87V