

Portfolio

Silvia M. Koch



www.silviamkoch.com
www.linkedin.com/in/silviamkoch
silviamkoch@gmail.com

User Interface Design

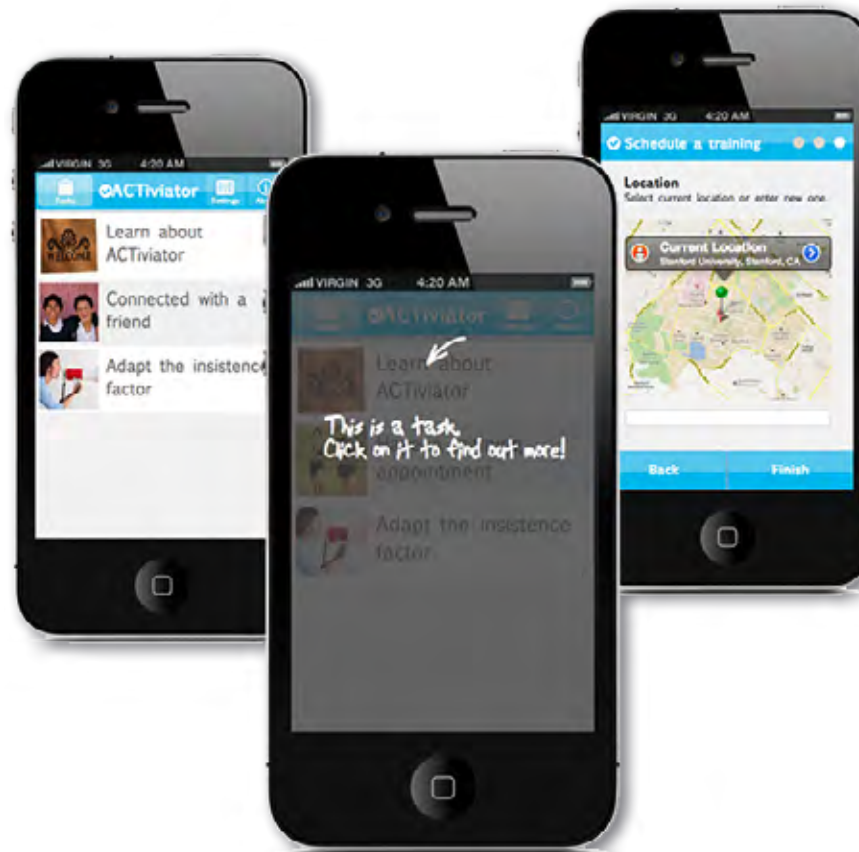
Storyboarding, Wireframing and Rapid Prototyping

As part of a course in Human Computer Interaction with Coursera, I worked on a digital prototype for a smartphone app. The process included needfinding, storyboarding, wireframing and a high-fidelity prototype.



Wireframe of several screens in the process flow (with Balsamiq)

<http://bit.ly/smkwire>



Digital prototype of the wireframe screens (with Justinmind Prototyper)

<http://bit.ly/smkproto>

Skills

Storyboarding

Wireframing

Rapid Prototyping

Software

Balsamiq

Justinmind Prototyper

User Testing

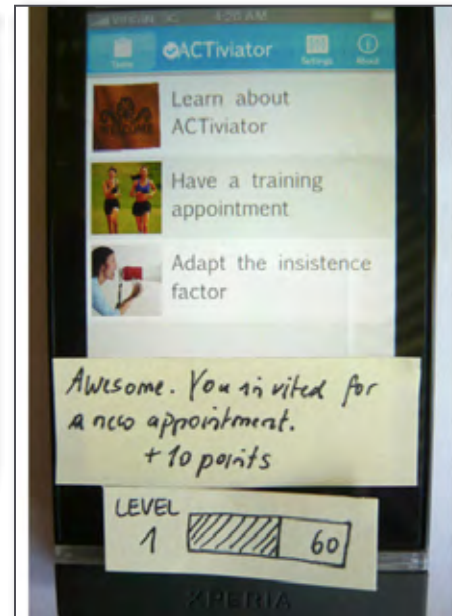
With Feature Variation

As part of a course in Human Computer Interaction with Coursera, I tested a digital prototype in a test setting with real users. Together with a paper prototype, it was possible to test feature variations to measure different user experiences.

As a software engineer (see “Software Engineering” on page 6), I had designed and tested user interfaces for years, and I executed user observations to bring usability improvements back into the software. Following a course in Human Computer Interaction, I was able to improve my prior user testing efforts.



User with the digital prototype adapted with a paper prototype variation



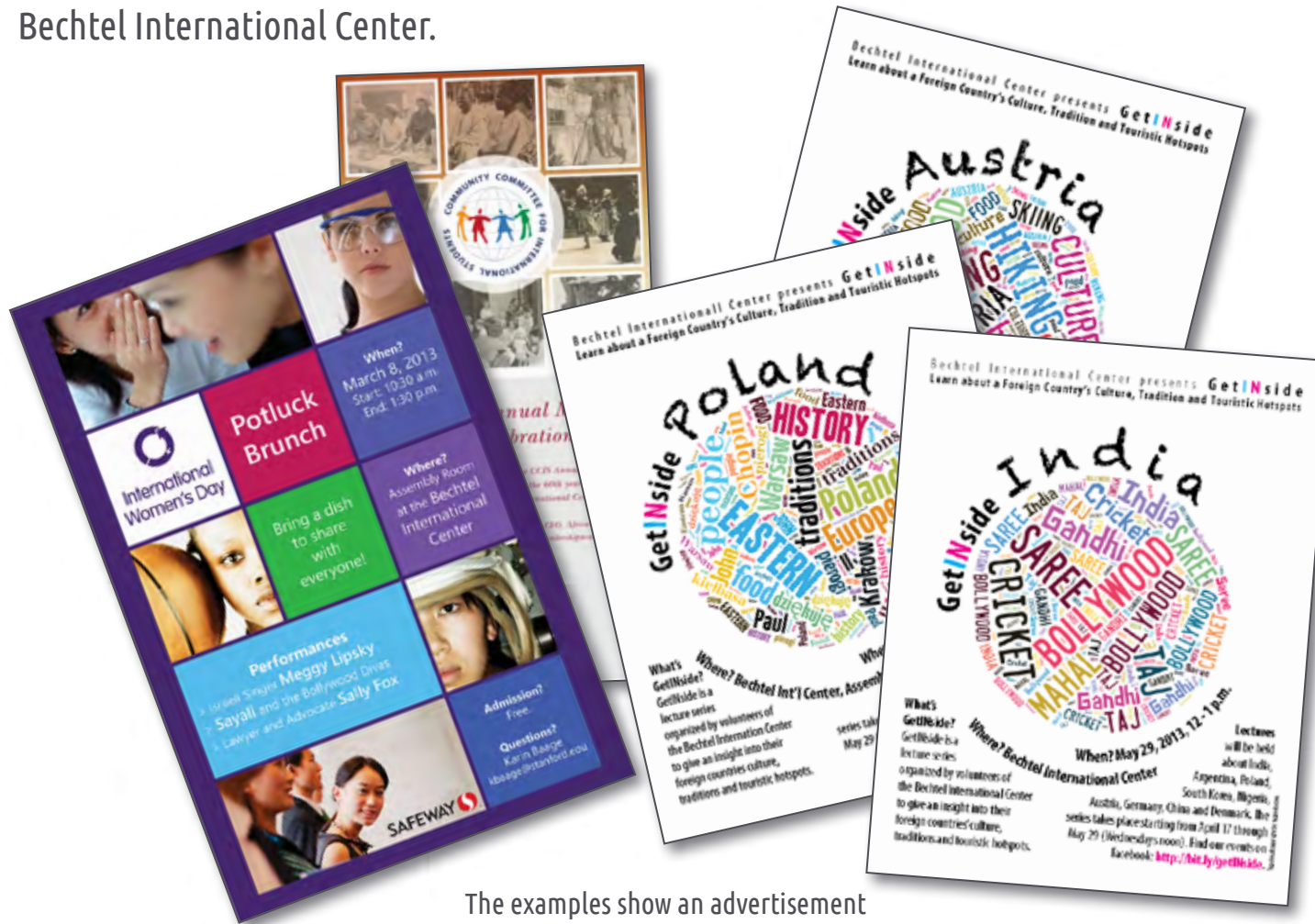
Paper prototype adaption shows how a new feature would behave

Skills
User Testing
Paper Prototyping

Graphic Design

Event Posters

I have been creating posters and invitations announcing events for Stanford University, Bechtel International Center.



The examples show an advertisement for the International Women's Day poster, an invitation and posters using tag clouds and announcing presentations about foreign countries from an event series.

Skills

Poster Design

Software

Desktop Publishing

Adobe InDesign, Scribus

Image Editing

Adobe Photoshop, Gimp

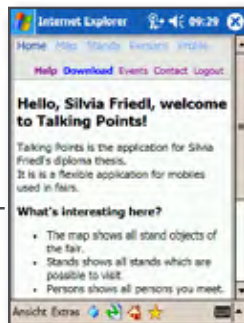
Webpages

Accessibility and Responsive Webdesign

The webpage for my Master's thesis was designed with responsive web design. Moreover, the website was accessible to visually impaired people through the use of screen readers. My current website uses Javascript and jQuery libraries as well.



The webpage for my Master's thesis was designed with responsive web design. Information (e.g., at a fair) is collected with mobile devices exploiting RFID technology. This information is presented through a webpage that is designed to use one single point of content, implemented with HTML and PHP. Responsive designs enables the same page being showed on both mobile devices and standard computers.



A particular focus for me as a designer is that webpages should be accessible to the widest audience, in particular to visually impaired people. I created my Master's thesis homepage and former personal webpage according to the WAI* standard. This concept allows visually impaired people to have access via a screen reader or a braille terminal. Technically, objects such as images or videos are augmented with specific tags in order to facilitate the navigation with these alternative devices. The screenshots show the website in different styles (with and without stylesheet).



My current homepage utilizes HTML, CSS, Javascript (jQuery) and Google Analytics.

Skills
HTML
CSS
Javascript
Responsive Webdesign and
Web Accessibility Awareness
Software
Text Editor

*WAI Web Accessibility Initiative

Software Engineering

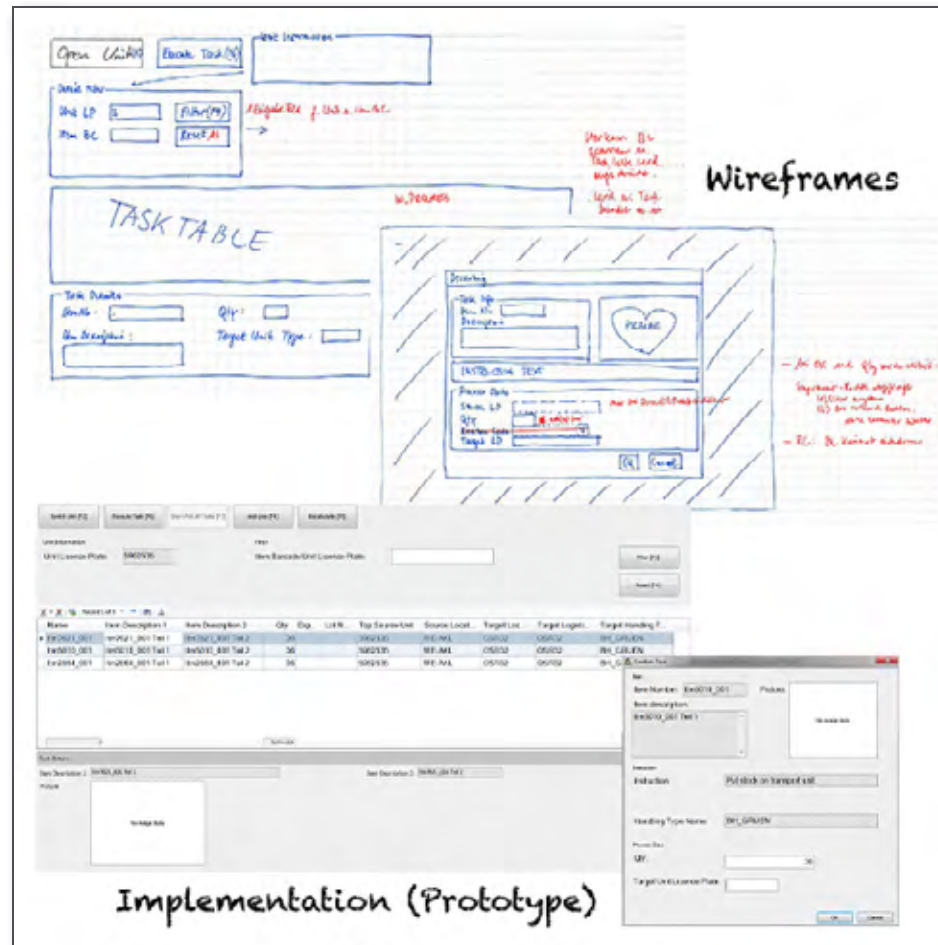
User Interfaces in Warehouse Logistics

As a Software Engineer, I was in charge of the user interface of several warehouse logistics software solutions for clients such as John Lewis, Boots and Kaiser Permanente.

I developed user interfaces throughout the whole product-life-cycle, from requirements engineering to the software design, low and high-fidelity prototypes, and the final front end and back end implementation. I implemented user interfaces for workstations and mobile devices.

Additionally, I trained large groups of key users on the software within a one-week workshop.

The images show examples of my work as software engineer at KNAPP System Integration, a leading provider of warehouse logistics systems.



Skills
Software Design
SCRUM
Java
C#
User Training
Software
Eclipse
Visual Studio

Video-Editing

Instructing Video Workshops and Personal Projects

I held video workshops for college students and was responsible for the production of the project video for a gender-mainstreaming project. I have also been editing movies for private occasions, such as weddings and anniversaries.



My most recent video-editing project (on the left) demonstrates my skills in this field and was made based on material of a two-days outdoor trip (<http://youtu.be/T8pU0268Q1M>).

For a gender-equality project, I instructed high school students in video production during a workshop lasting several weeks. The picture (on the right) shows high school students during the workshop.



Skills

Video-Editing

Lecturing

Software

Video/Sound Editing

Adobe Premiere, Audition

Mac iMovie

Microsoft Movie Maker

Image Editing

Adobe Photoshop

Book and Paper Publication

RFID and Ubiquitous Computing

My Master's thesis focussed on fields of ubiquitous application for RFID. My theoretical framework of Ubiquitous Computing and my implementation resulted in a book publication and a peer-reviewed journal publication .

My thesis' practical implementation topic was a mobile RFID prototype



collecting different information units at a fair and providing the collected data using a web application.

My theoretical framework of Ubiquitous Computing and its implementation resulted in a book publication distributed over Amazon¹ and a peer-reviewed journal publication². In my thesis, I was able to combine many fields that I am enthusiastic about: new technologies and user interfaces, such as webpages using accessibility and responsive web design.

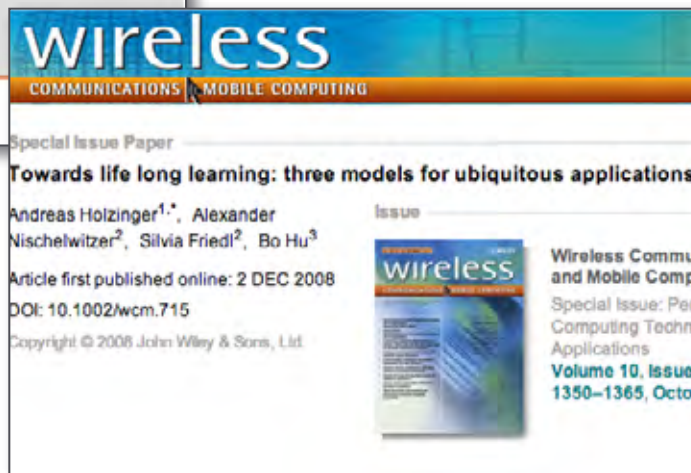
1 <http://www.amazon.com/dp/3639100964>

2 <http://onlinelibrary.wiley.com/doi/10.1002/wcm.715/abstract>

I presented the results at a student's conference poster session.



Skills
Scientific Writing
C#
HTML, CSS
Software
LaTeX



*Thank you for your interest.
For further requests feel free to
contact me.*

www.silviamkoch.com
www.linkedin.com/in/silviamkoch
silviamkoch@gmail.com

WORK EXPERIENCE

GRAPHIC DESIGN AND WEB DEVELOPMENT VOLUNTEER

since 11/2012

Stanford University, Bechtel International Center, Stanford, CA

- Text and layout for posters and printed documents for several single events and an event series

SOFTWARE DEVELOPER

1/2007-9/2012

Strategic Development, KNAPP System Integration, Graz, Austria || Logistics

User Interface and Usability

- Collaborated in usability tests targeting a consistent interaction design and screen layout for all company products
- Rapidly designed wireframes, created interaction designs and information architecture for desktop and mobile screens
- Prototyped and developed user interfaces for workstations and mobile devices

User Training

- Trained group of key users (20 persons) on Warehouse Management System (WMS) features within a one-week workshop

Software Design and Development, Testing and 3rd Level Support

- Designed software features using UML
- Collaborated in fast-changing teams using SCRUM as agile software development method
- Solved tasks with Java and JBoss application server for back-end and C# for front-end needs
- Developed unit and integration tests to improve test coverage and supported test teams with manual tests
- Monitored software (e.g. log files) to identify long-lasting requests or faulty behavior and fixed causes
- Supported software startup phases remotely as well as during on-site stays at the customer

RESEARCH ASSISTANT and STUDENT ASSISTANT

2001-2006

Information Management, FH JOANNEUM, Graz, Austria || Teaching and Research

- Interviewed test persons to support intranet usability activities for the Province of Styria
- Organized events for a gender equality project which was well received by sponsors and participating schools
- Developed an accessible website for visually impaired persons via alternative devices (www.joballianz.at)
- Instructed high school students in video production during a several-weeks lasting workshop
- Set up and maintained multimedia installations in the *TouchIT!* Museum and guided tours

EDUCATION AND TRAINING

Javascript, jQuery and Ajax Workshops, Girl Develop It, San Francisco, CA

03/2013-05/2013

Human Computer Interaction, Coursera, held by Scott Klemmer, Stanford University, Stanford, CA
Studio Track about Prototyping an User Interface - Statement of Accomplishment: with Distinction

04/2013-06/2013

Databases, Class2Go, held by Jennifer Widom, Stanford University, CA

01/2013-03/2013

Contents: XML, XPath, XQuery, XSLT, JSON, SQL; Statement of Accomplishment: with Distinction

Enhanced Website Design, Stanford Continuing Studies, Mark Branom, Stanford University, CA

01/2013-03/2013

Master of Science, Information Management (Information and Computer Science)

10/2001-10/2005

University of Applied Sciences FH JOANNEUM, Graz, Austria (GPA 3.8/4.0)

- Coursework: Object Oriented Programming, Internet Technologies, Database Design, Software Engineering, Multimedia Technologies, Network Technologies, Operating Systems, Knowledge Management, Process and Project Management
- Master Thesis: *"TalkingPoints – A mobile RFID application in the area of Ubiquitous Computing"*: Implemented a mobile solution that collects contacts and other information via RFID tags. Created a website providing gathered data.

SKILLS

Prototyping	Balsamiq, Justinmind Prototyper
Desktop Publishing	Adobe InDesign, Scribus
Image Editing	Adobe Photoshop, Gimp
Video/sound Editing	Adobe Premiere, Adobe Audition
Web	HTML, CSS, Javascript, jQuery
Programming	Java, C#, Oracle SQL, Hibernate QL, XML, XPath, XQuery, XSLT
Languages	German: native proficiency English: professional working proficiency Italian: elementary proficiency

ACHIEVEMENTS

- Awarded with a Stanford University Education Fund, Community Committee for Intl. Students, CA, USA 2012
- Paper Publication: Holzinger, A., Nischelwitzer, A., Friedl, S.* and Hu, B., *Towards life long learning: three models for ubiquitous applications*, Wireless Communications and Mobile Computing, vol. 10, 2010, pp. 1350–1365. 2010
- Book Publication: Silvia Friedl*, *“RFID im Ubiquitous Computing: TalkingPoints als mobile RFID-Anwendung”* (RFID in Ubiquitous Computing: TalkingPoints – a mobile RFID Application), ISBN 3639100964 (VDM Verlag Dr. Müller, Germany, 2008). 2008

* maiden name