Katie Gibson

katie@emountainworks.com

OBJECTIVE   To develop innovative next-generation mobile apps and web services on iOS, Android, .NET, and Google platforms.

SKILLS   Mobile app development on iOS and Android platforms using Objective-C, Java, SQLite, Google Cloud Messaging, REST API's, and Google Maps. Web app development utilizing .NET Framework, SQL Server, Google Maps, AJAX, SOAP, and REST web services. Languages include Java, Objective-C, C#, VB, C++, C, perl, and javascript. Database experience with Sqlite, SQL Server, Informix, and Oracle. Server experience with Windows Server, IIS7, and ISA firewalls. Network experience including VPNs, routing, remote access, and WiFi bridges.

EDUCATION   **M.S. Computer Science**, Oregon State University, July 1990.
B.S. Electrical Engineering, University of Colorado, May 1984.

CONSULTING WORK

High Country Apps, LLC (www.highcountryapps.com) 2011-2016
In partnership with regional herbariums and universities, developed twenty iOS and Android apps including these titles: ***"Oregon Wildflowers", "Yosemite Wildflowers", "Idaho Wildflowers", "Montana Grasses", "Colorado Wildflowers", "Washington Wildflowers", "Flora of Yellowstone", "Flora of Wasatch", "Glacier Wildflowers", "Flora of Texas: Fort Worth Prairie"***. (iOS, Android, Objective-C, Java, Sqlite)

"1 Day Jobs List" app for Kolstads (2016)
Developed iOS version of a small jobs app for employers and workers. (iOS, REST, Google Cloud Messaging)

"Mole Mapper Melanoma Study" app for Oregon Health and Sciences University (2015-2016)
Worked with OHSU in their early work of formulating ideas to collecting large quantities of patient and lesion information for a research study to understand skin biology and melanoma risks.

"Yellowstone Outdoors" app for Yellowstone Park Foundation (www.ypf.org) (2013-2015)
Developed and launched *Yellowstone Outdoors*, a mobile app for visitors to the Greater Yellowstone Region. (iOS, Android, Objective-C, Java, MapTiler, Sqlite)

"EagleViewer" app for Eagle Digital Imaging (www.eagleimaging.net) May 2014
Developed *EagleViewer* prototype, a mobile app for precision agriculture and forestry using imagery of crop land and forests overlaid onto Google Maps. (Android, Java, MapTiler, Sqlite)

"Wonderland" app for Idaho State University Department of History (www.isu.edu/history) (2014). Developed *Wonderland* prototype, a mobile app for Historical Landscape Conservation and Interpretation in Yellowstone National Park. (iOS, Objective-C, MapTiler, Sqlite)

Yellowstone Ecological Research Center (www.coasterdata.net) January 2011-2013
 Developed CoasterData.net, a web application used by climate scientists to aggregate geospatial datasets. Partnered and hosted with Rocky Mountain Supercomputing Center *(www.rmscinc.org)*. (GDAL geo-spatial libraries, web services, and .NET web technologies)

Hyperspectives, Inc (www.climatescape.net) 2008-2011
Developed ClimateScape.net, a web application for climate scientists, mashing up real-time data rendered on GoogleMaps. Implemented a sensor network with live weather stations, IP cameras, water quality stations, and network equipment. Funded by NSF. Partnered with Cisco. (.NET, GoogleMaps API)

*Ticketprinting.com (www.ticketprinting.com) 2004-*2008
Built an affiliates system to gain revenue from referred sales. Built a web-based employee time tracking and benefits system. Integrated e-commerce sites to an accounting system. Set up production servers including a web server, ISA server, Small Business Server, and SQL database server. Set up network, remote access, firewall, and VPNs. (.NET, C#.NET, SQL Server)

*Connexa Softools, Inc (www.connexatools.com) 2006-*2007
Developed ASP.NET web applications incorporating AJAX controls for product configuration and customer quoting systems. Developed .NET ERP Adapters for integration with customer accounting packages including Quickbooks, Microsoft SBA, and Great Plains.
(.NET, WinForms, C#, AJAX, SQL Server 2005, and N-Unit)

EdgeInova, Inc (www.edgeinova.com) 2006
Developed point of sale tools for customer care (.NET, C#, AJAX, javscript, web services, and SQL Server 2005)

TEXbase, Inc (www.texbase.com) 2002-2006
Worked as the startup's sole developer to produce web applications & web services for the textile industry. My web services assisted with the launch of Ingeo by NatureWorksLLC.com. TEXbase software is used today by numerous textile mills for developing and testing new textiles and by apparel manufacturers for sourcing textiles. (ASP.NET, VB.NET, SQL Server)

Hyperspectives, Inc (www.hyperspectives.net) 2003
Implemented a workflow solution for processing remotely sensed data using BEA WebLogic. (Java, EJB, C/C++, IDL)

GE-Harris Railway Systems, 2000-2001
Implemented an Object to Relational persistence framework for mapping railway objects and collections to an Oracle database. (C++, Sun Solaris)

National Institute of Standards and Technology SBIR Grant, 2000-2001
Developed a system for web-based workflow management using EJB & CORBA.

Bell & Howell Publishing Systems, 1999-2000
Built a C++ application on SCO-Unix to upload data from dealer management systems to a centralized server. Took part in implementing a workflow framework for next generation publishing processes while retaining the ability to reuse legacy software (Java, CORBA).

PREVIOUS EMPLOYMENT

Hewlett-Packard, 1984-1999
Inkjet Business Unit, Corvallis, OR, 1991-1999
Software Engineer tasked with building high-speed inkjet pen final assembly production modules. Built automation, machine vision systems, supervisory systems, statistical process control systems, process monitoring, material lot tracking, and pen birth certificate tracking systems that contributed to 11 production lines in 3 countries. Programmed in C/C++, US Data's FactoryLink, Perl, HP-UX, Informix, PLC-5.
Mobile Communications Division, Corvallis, OR, 1991
Software Engineer for the HP 95/100LX Palmtop PC.
Interface Technology Operation, Corvallis, OR, 1990-1991
Software Engineer for HP VUE and Motif on HP-UX & Domain Operating Systems.
Ft. Collins Systems Division, Ft. Collins, CO, 1984-1989
Electrical Component Engineer - Microprocessors, Power Supplies, PLAs, PALs.

Rockwell International, Westminster, CO, 1983
Summer college internship as a Facilities Engineer.

RECENT PUBLICATIONS & INVITED TALKS

Weiss, D., Gibson, K., Sojka, C., Sheldon, J., Crabtree, R., **Customized Online Aggregation & Summarization Tool for Environmental Rasters**, Scientific Research; December 2012, Vol.4 No. 6.

Smart Phone Apps as Tools for Science Discovery, Communication, and Decision Making, Invited talk at the 11th Biennial Scientific Conference on the Greater Yellowstone Ecosystem; October 2012.

Climatescape.net – an Intuitive Web Tool For the Study of Climate Change, Invited talk at the 10th Biennial Scientific Conference on the Greater Yellowstone Ecosystem; October 2010.

PROFESSIONAL ORGANIZATIONS

Institute of Electrical and Electronics Engineers (IEEE), member, 1984-present.