**Steve Wei Feng**

3939 Moore St Apt 103, Los Angeles, CA 90066

stevewfeng@gmail.com

cell: (925) 550-6148

SUMMARY OF QUALIFICATIONS

* 6 years’ experience leading teams developing computational biomedical diagnostic and sensing applications for mobile and wearable platforms, composed of:
* full-stack software development, with focus on website and backend services
* image processing and machine learning for object detection, segmentation, and tracking in biomedical images
* computational infrastructure development and support (IT services)

PROFESSIONAL EXPERIENCE

Cellmic LLC (<http://cellmic.com/>)

*Software Engineer, Consultant*

Los Angeles, CA

05/2013 – Present

* Developed HIPAA-compliant Ruby on Rails web server and Java backend servers for supporting smartphone-based rapid diagnostic test (RDT) readers, currently serving >5 customers and for >10 devices
* Developed MATLAB-based GUI interface for holographic image reconstruction, deployed with prototype holographic microscopes to customers
* Performed as core software developer for multiple federal small business grants, with multiple yearly grant renewals
* Continuing role includes general cloud architecture maintenance

|  |  |
| --- | --- |
| **Ozcan Research Group** (<http://innovate.ee.ucla.edu>)**University of California, Los Angeles (UCLA)** | Los Angeles, CA |
| *Associate Development Engineer* | 07/2014 – Present |
| *Junior Development Engineer* | 04/2013 – 07/2014 |
| *Graduate Student Researcher* | 09/2011 – 03/2013 |
| *Lab Assistant* | 04/2010 – 08/2011 |

* Co-authored 12 referred journal publications and >25 referred conference proceedings on portable cost-effective biomedical diagnostic and sensing platforms
* Led computational division of >10 lab members to develop >8 Android and Windows Phone-based mobile applications, backend servers, and websites for smartphone-based or wearable biomedical diagnostic and sensing platforms
* In late 2015, directed an online web-based global health-oriented educational outreach in South Korea with >1600 middle and high school student participants, with successive programs planned in Los Angeles and South Korea
* Designed, implemented, and now maintaining cluster of shared computational resources (e.g., computational processing servers, web servers, backend servers) supporting >80 lab members and all group research activities

**University of California, Berkeley**

*Software Developer, California PATH*

Richmond, CA

07/2009 – 12/2010

* Developed mobile phone trip planner for Bay Area transportation pilot project (Networked Traveler)

OTHER PROJECTS

**StudyFinder** (<http://studyfinder.us/>)

03/2016 – 06/2016

* Developed web-based platform for conducting research study screening, enrollment, and informed consent
* Recruited >160 participants for 2 UCLA HIV studies targeting men in Los Angeles

**PneumoGel Sealant System**

01/2013 – 12/2015

* Developed and patented a novel medical device for sealing the lung post-biopsy to reduce complications (e.g. pneumothorax) while providing longer lasting pain-relief
* Awards: 1st Place, 2013 UCLA Safety in Medicine competition; Finalist, 2014 UCLA Anderson Venture Team competition; Winner, 2015 Nanjing startup competition

**Flyr**

05/2014 – 12/2015

* Developed iOS app for local live event discovery using flyers
* Awards: 1st Place, 2014 AngelHack LA hackathon

EDUCATION

**University of California, Los Angeles (UCLA)**

M.S., Electrical Engineering

March 2013

GPA: 3.478

**University of California, Los Angeles (UCLA)**

B.S., Electrical Engineering

June 2011

GPA: 3.603

PROFESSIONAL SOCIETIES

* Institute of Electrical and Electronics Engineers (IEEE), Member
* The International Society of Optical Engineering (SPIE), Member
* Optical Society of America (OSA), Member
* Biomedical Engineering Society (BMES), Member
* American Chemistry Society (ACS), Member
* Tau Beta Pi (TBP) Engineering Honor Society
* IEEE-Eta Kappa Nu (HKN) Honor Society

HONORS

* Invited member: Artiman BETA Program – Class of 2015 (<http://www.artiman.com/beta>)
* Project Mentor 2014-2016: Howard Hughes Medical Institute (HHMI) Undergraduate Research and Training Program (<http://org.ee.ucla.edu/hhmi>)

PATENTS

* F. Abtin, **S. Feng**, S. Zhang, X. Li, S. Mukkamala, inventors; “Hydrogel Pressure Sealant System” (pending, U.S. Patent Application No. 61/831,375, filed 6/5/2013. International Patent Application Serial No. PCT/US14/41075, filed 6/5/2014)
* A. Ozcan, S. Mavandadi, **S. Feng**, F. Yu, R. Yu, inventors; “BIG FOOT: Analysis, Monitoring, Tracking and Sharing of Biomedical Features of Human Appendages” (pending, U.S. Patent Application 61/697,725 filed 9/06/2012)

JOURNAL PUBLICATIONS

1. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, **S. Feng**, Q. Wei, R. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O.B. Garner, and A.Ozcan. Cellphone-Based Hand-Held Micro-Plate Reader for Point-of-Care Testing of Enzyme-Linked Immunosorbent Assays. ACS Nano, July 9, 2015.
2. B. Cortazar, H.C. Koydemir, D. Tseng, **S. Feng**, and A. Ozcan. Quantification of Plant Chlorophyll Content Using Google Glass. Lab on a Chip, February 4, 2015.
3. H.C. Koydemir, Z. Gorocs, D. Tseng, B. Cortazar, **S. Feng**, R.Y.L. Chan, J. Burbano, E. McLeod, and A. Ozcan, Rapid imaging, detection and quantification of Giardia lamblia cysts using mobile-phone based fluorescent microscopy and machine learning. Lab on a Chip, December 16, 2014.
4. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, D. Tseng, R. Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, **S. Feng**, and A. Ozcan. Imaging and Sizing of Single DNA Molecules on a Mobile-Phone. ACS Nano, December 10, 2014.
5. S.K.J. Ludwig, H. Zhu, S. Phillips, A. Shiledar, **S. Feng**, D. Tseng, L.A. van Ginkela, M.W.F. Nielsen, and A. Ozcan. Cellphone-based detection platform for rbST biomarker analysis in milk extracts using a microsphere fluorescence immunoassay. Analytical and Bioanalytical Chemistry, June 28, 2014.
6. **S. Feng**, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan. Immunochromatographic Diagnostic Test Analysis Using Google Glass. ACS Nano, February 27, 2014.
7. Q. Wei, R. Nagi, K. Sadeghi, **S. Feng**, E. Yang, S. Ki, R. Caire, D. Tseng, and A. Ozcan. Detection and Spatial Mapping of Mercury Contamination in Water Samples using a Smart-Phone. ACS Nano, January 20, 2014.
8. S. Mavandadi, **S. Feng**, F. Yu, S. Dimitrov, K. Nielsen-Saines, W. R. Prescott, and A. Ozcan. A Mathematical Framework for Combining Decisions of Multiple Experts toward Accurate and Remote Diagnosis of Malaria Using Tele-Microscopy. PLoS ONE, October 11, 2012.
9. S. Mavandadi, **S. Feng**, F. Yu, S. Dimitrov, R. Yu, and A. Ozcan. BioGames: A Platform for Crowd-Sourced Biomedical Image Analysis and Telediagnosis. Games for Health Journal, vol. 1, issue 5, 4102-4106, October 5, 2012.
10. S. Mavandadi, S. Dimitrov, **S. Feng**, F. Yu, R. Yu, U. Sikora, and A. Ozcan. Crowd-sourced BioGames: Managing the Big Data Problem for Next-Generation Lab-on-a-Chip Platforms. Lab on a Chip, vol. 12, 4102-4106, August 8, 2012.
11. S. Mavandadi, S. Dimitrov, **S. Feng**, F. Yu, U. Sikora, O. Yaglidere, S. Padmanabhan, K. Nielsen, and A. Ozcan. Distributed Medical Image Analysis and Diagnosis through Crowd-Sourced Games: A Malaria Case Study. PLoS ONE, May 11, 2012.
12. S. O. Isikman, W. Bishara, S. Mavandadi, F. W. Yu, **S. Feng**, R. Lau, and A. Ozcan. Lens-free Optical Tomographic Microscope with a Large Imaging Volume on a Chip. PNAS, vol. 108, no. 18, 7296-7301, May 3, 2011.

CONFERENCE PRESENTATIONS

1. **S. Feng**, M.J. Woo, H. Kim, E.S. Kim, S.J. Ki, L. Shao, and A. Ozcan. A game-based crowdsourcing platform for rapidly training middle and high school students to perform biomedical image analysis. SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings II, February 13-18, 2016, San Francisco, CA, USA.
2. **S. Feng**, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan. Google Glass-based Rapid Analysis of Immuno-chromatographic Diagnostic Tests. OSA Frontiers in Optics (FiO) Conference, October 18-22, 2015, San Jose, California, USA.
3. **S. Feng**, M. Woo, S. Ki, L. Shao, K. Huang, Z. Wen, J. Wu, and A. Ozcan. Game-based crowdsourcing platform for malaria diagnostics and training of diagnosticians. 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA.
4. **S. Feng**, and A. Ozcan. Online Training and Educational Games for Malaria Diagnosis and Expert Scoring. 6th Annual CUGH (Consortium of Universities for Global Health) Global Health Conference, CS01 Education, Training, Capacity Building, March 26-28, 2015, Boston, MA, USA.
5. **S. Feng**, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan. Google Glass based immunochromatographic diagnostic test analysis. SPIE Photonics West, Optical Diagnostics and Sensing XV: Toward Point-of-Care Diagnostics, February 6-12, 2015, San Francisco, CA, USA.
6. **S. Feng**, M.J. Woo, K. Chandramouli, and A. Ozcan. A game-based platform for crowd-sourcing biomedical image diagnosis and standardized remote training and education of diagnosticians. SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 6-12, 2015-, San Francisco, CA, USA.
7. Q. Wei, R. Nagi, K. Sadeghi, **S. Feng**, D. Tseng, and A. Ozcan. Quantitative Mercury Sensing and Spatiotemporal Mapping Using a Smartphone. BMES (Biomedical Engineering Society) Annual Meeting, October 22-25, 2014, San Antonio, Texas, USA.
8. **S. Feng**, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan. Google Glass based immunochromatographic diagnostic test analysis. 248th ACS (American Chemistry Society) National Meeting & Exposition, August 10-14, 2014, San Francisco, CA, USA.
9. S. Mavandadi, **S. Feng**, F. Yu, S. Dimitrov, R. Yu, U. Sikora, O. Yaglidere, S. Padmanabhan, and A. Ozcan. BioGames: A Platform for Crowd-sourced Biomedical Image Analysis and Tele-Diagnosis. SCAS (Southern California Academy of Sciences) Annual Meeting, May 2-3, 2014, California State University Channel Islands.
10. S. Mavandadi, **S. Feng**, F. Yu, S. Dimitrov, R. Yu, and A. Ozcan. BioGames – A crowd-sourced gaming platform for distributed tele-pathology and training of experts. BMES (Biomedical Engineering Society) Annual Meeting, September 25-28, 2013, Seattle, WA, USA.
11. S. Mavandadi, **S. Feng**, F. Yu, S. Dimitrov, R. Yu, U. Sikora, O. Yaglidere, S. Padmanabhan, and A. Ozcan. BioGames for Crowd-sourced Tele-Pathology, Diagnosis and Medical Expert Training. 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, CA, USA.