

# Tamara Blain

2605 Haste St. #202, Berkeley, CA 94704 • (510) 229-6117 • [tamarablain@gmail.com](mailto:tamarablain@gmail.com)

## Objective

I am looking for a challenging opportunity to apply my proven programming experience, and my multi-disciplinary approach to innovative problem solving.

## Summary of Qualifications

- Extensive project experience programming in Python, including an implementation of a BCI-controlled communication system for Master's Thesis
- Four years experience front and backend web development on large scale projects involving cross-functional teams and tight deadlines
- Experience writing code for limited memory and resources

## Education

M.S. E.E., UC Berkeley, Berkeley CA, December 2009

B.S. C.S., CUNY Queens College, New York NY, May 2003

B.S. Biochemistry, SUNY StonyBrook, StonyBrook NY, May 1995

## Relevant Experience

### Research Assistant, 7/2003 – 12/2006

*Lawrence Berkeley National Labs, Berkeley, CA*

- Assisted the group that developed the front-end system of the Spallation Neutron Source (SNS), which provides pulse neutron beams used to determine the atomic make-up of materials.
- Designed modules that enabled additional functionality to the FPGA emulating the SoC controller of the RF-based acceleration system, allowing greater flexibility and control to SNS users.
- Verified designs, ensuring correctness and functionality.

### UC Berkeley Student Projects

- A BCI-Controlled Virtual Keyboard Design for Noisy Input and Limited Bandwidth  
Designed and implemented a Python simulation of a method of communicating over a brain-computer-interface (BCI) constrained by noise and bandwidth; Master's project.
- Catching Phish: Detecting Phishing Attacks from Rendered Website Images  
Developed a method of thwarting phishing attacks using machine learning techniques on rendered images of websites; class project.

### Web Developer, 6/1999 – 9/2002

*Concrete Media Inc., New York, NY*

- Developed websites and intranets for such large companies as, Bertelsmann AG, The Princeton Review, and ScreamingMedia.
- Developed large-scale portal sites such as GirlsOn.com, Lids.com, Bolt.com, and Homeroom.com.
- Ensured unerring code performance across all browser engines.

- Initiated and created a centralized system, which improved site development efficiency and enhanced developer collaboration.
- Stimulated the interest of new clients by producing presentations of cutting edge client-side technologies, to be delivered by the marketing team.
- Surveyed web trends and technologies for opportunities to improve client websites
- Interviewed prospective developers, ensuring their quality, capabilities, and culture-fitness.

### **Web Developer Intern, 11/1998 – 6/1999**

*Sensenet, Inc., New York, NY*

- Helped actualize the web footprint of such large companies as Pfizer and Sprint.
- Designed and implemented rigorous usability tests for significant clients such as Metamucil, Showtime, and Captain Morgan.
- Resolved, tracked, and documented technical issues with client sites in a timely fashion.

## **Technical Expertise**

### **Programming Languages**

*Proficient:* Python , C++, Matlab, Verilog

*Knowledgeable:* HTML, JavaScript, Actionscript, SQL, ASP, Java, R, C, VHDL, x86 assembly, ARM IS

### **ASIC/FPGAs**

*Knowledgeable:* Xilinx, Altera

### **Systems**

*Proficient:* Linux, Windows, Mac OSX

### **Version Control**

*Proficient:* CVS, GIT

*Knowledgeable:* SVN

## **Professional Affiliations**

IEEE, ACM

## **Interests**

Developing for Mobile Devices, Machine Learning, Computer Architecture, and Robotics