Matt Ball

- oakmachine.com
- Redwood City, CA

Work Experience

Culture Biosciences, Cofounder and CTO -- Jun 2016 to Apr 2024

- custom hardware and software for automated fermentation systems.
- building and leading R&D teams
- strategy, fundraising

Endaga, Member of Technical Staff -- Feb 2015 to Oct 2015

- wrote software for the user interface, cell phone towers and backend servers
- built software to connect to an open source telephony backend
- acquired by Facebook

Google[x], Software and Hardware Engineer -- Apr 2013 to Feb 2015

- worked on Project Wing and the delivery subsystem
- tested and improved electronic speed controllers
- built an end-to-end simulation system

Aquaya Institute, Program Associate -- Feb 2012 to Feb 2013

- conducted pilot projects in Cambodia, Vietnam and Mozambique
- built an open source web application for data management and analysis
- built a voice-based data collection system, also open source

Redwood Systems, Applications Engineer -- Oct 2010 to Nov 2011

- built a web-based system for displaying sensor information
- created a statistical analysis library for analyzing energy efficiency data
- developed a mobile phone application for controlling lights
- acquired by CommScope

Projects

- Neural Carputer -- autonomous, neural network-based 1:10 scale car built for the Sparkfun autonomous vehicle competition
- Setbot -- computer vision and neural networks for playing the card game Set at a level on par with a skilled human player

Education

Duke Universtiy, Civil and Environmental Engineering, BSE -- Sept 2006 to May 2010

- worked with local partners in Uganda and Bolivia via Engineers without Borders
- designed, built and tested electronic devices for hospitals via the Engineering World Health organization