Matt Ball

- oakmachine.com
- Redwood City, CA

Work Experience

Active Spark, Owner — Jan 2025 to present

- firshello.ai — AI driven customer support for SMB
- audioverde.com — pipeline for custom podcasts driven by LLMs

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

- custom hardware and software for automated, bench-scale bioreactors as a service
- hiring and leading R&D teams of 30+ engineers
- strategy and fundraising: $100M+ raised through pre-seed, YC, seed, Series A, Series B

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

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

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

- Project Wing automated drone delivery: prototyping delivery subsystems and field testing
- bench testing, qualification and improvement of electronic speed controllers
- end-to-end service simulation system

Aquaya Institute, Program Associate — Feb 2012 to Feb 2013

- conducted pilot projects in Cambodia, Vietnam and Mozambique
- 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

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

Other Projects

- Whenpress.net - niche electronic device to reliably track button presses through cell network and serverless backend
- Neural Carputer - autonomous, 1:10 scale racecar, neural network trained on vision-only data
- 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