

OMOJU THOMAS MILLER

EX-GITHub | EX-GOOGLE | WHITE HOUSE ADVISOR | UC BERKELEY PH.D.

profession
experience

- Fimio - Founder and CEO** San Francisco, CA | June 2022-May 2026
- Founded a venture-backed AI infrastructure company; built and shipped a sandboxed AI inference deployment platform and a malicious smart-contract detection API.
 - Backed by Redpoint Ventures, Protocol Labs, and Neo, with angel investors including Nat Friedman; wound the company down in 2026 and returned remaining capital to investors.
- GitHub - Technical Advisor to CEO** San Francisco, CA | Feb 2020-Feb 2022
- Supported the CEO in bringing GitHub Copilot to market, the first mainstream AI coding assistant.
 - Led tiger teams prototyping and architecting solutions for the CEO and product leadership, including Gitmos, a real-time visualization of all global open source activity.
 - During this tenure GitHub grew from 50M to 73M developers, took Actions to the #1 CI service, and reached 84% of the Fortune 100.
- GitHub - Senior Data Scientist, Machine Learning** San Francisco, CA | July 2017-Feb 2020
- Applied machine learning to optimize the software development lifecycle on GitHub.
 - Co-built GitHub's first repository recommendation engine (Discovery Dashboard), attaining a 20% click-through rate.
- Insight Data Science - Data Science Fellow** Palo Alto, CA | Jan 2017-Jun 2017
- Built a large-scale hierarchical classification model for a YC backed management service company.
 - Scaled solution to accommodate growing taxonomy of item categories.
- UC Berkeley - CSEd Doctoral Candidate** Berkeley, CA | Dec 2013-May 2016
- Designed a machine learning research study to investigate gender in intro CS.
 - Developed a data science unit within a historical [intro CS course](#), CS10.
- Google - Technology Portfolio Manager** Mountain View, CA | Feb 2014-Dec 2015
- Co-led Google's \$15M Computer Science Education portfolio, growing it by 25%.
 - Co-led the development of the vocabulary glossary for Google's Android Development course.
- ICSI¹ - Graduate Researcher** Berkeley, CA | Mar 2011-Dec 2012
- Built a conceptual metaphor [Semantic Wiki](#) capable of ingesting data in English and Farsi.
 - Contributed to the design of conceptual metaphor framework.
- TEDxEuclidAve - Founder and Curator** Berkeley, CA | Aug 2011-Aug 2012
- Led a 10 person team responsible for executing on the vision.
 - Led strategy for [TEDxEuclidAve](#), a 100+ member conference, bringing together innovative thinkers across technology, design and entertainment in service of social entrepreneurship.

¹International Computer Science Institute

Center for Advanced Sensors - Graduate Researcher Memphis, TN | Aug 2003-Nov 2006

- Co-designed [OntoSensor](#), a sensor ontology using Semantic Web Ontology Language (OWL).
- Built an intelligent reasoning agent capable of reasoning with data in XML and RDF formats

Thoughtware Learning Technologies - Software Engineer Memphis, TN | Aug 1999-Nov 2001

- Contributed to the development of an AI eLearning workforce development platform.
- Quality assurance for an eLearning management system.

advisory & public service

U.S. Department of State - Expert Speaker, AI Diplomacy Lagos, Nigeria | Feb-Mar 2026

- Selected by the U.S. State Department for AI diplomacy in Nigeria: keynoted on the future of artificial intelligence at the University of Lagos and led responsible-AI training for 300+ staff and students at YABATECH with the U.S. Consulate General, Lagos.
- Engagements received national press coverage, including [The Guardian Nigeria](#).

Neo - Accelerator Mentor San Francisco, CA | 2022-2023

- Mentored founders across two cohorts of Ali Partovi's Neo Accelerator.

The White House - Advisor, Presidential Innovation Fellows Washington, DC | 2013-2015

- Volunteer advisor to the Obama Administration's Presidential Innovation Fellows program.
- Invited speaker at White House convenings on unintended bias and education data.

education

UC Berkeley - Computer Science Education, Ph.D. 2016

University of Memphis - Electrical and Computer Engineering, M.S. 2004

University of Memphis - Computer Science, B.S. 2001

teaching experience

Metis Data Science - Instructor San Francisco, CA | Fall 2017

- Introduction to Data Science

UC Berkeley - Graduate Student Instructor Berkeley, CA | Spring 2013

- Introduction to Cognitive Science

UC Berkeley - Graduate Student Instructor Berkeley, CA | Spring 2011

- Introduction to C++ programming

University of Memphis - Adjunct Faculty Memphis, TN | Spring 2010

- C programming for Engineers

University of Memphis - Graduate Student Instructor Memphis, TN | Spring 2006

- Computer Software Engineering

University of Memphis - Graduate Student Instructor Memphis, TN | Spring 2005

- Data Visualization

University of Memphis - Graduate Student Instructor Memphis, TN | Spring 2004

- Introduction to Computer Engineer Lab

publications

Conference proceedings

Omoju Miller. 2016. "Gaining Insights into the Effects of Culturally Responsive Curriculum on Historically Underrepresented Students' Desire for Computer Science." Proceedings of the 123rd ASEE Annual Conference, New Orleans, LA.

- D.J. Russomanno, C. Kothari and O. Thomas. 2005. “[Building a Sensor Ontology: A Practical Approach Leveraging ISO and OGC Models.](#)” The 2005 International Conference on Artificial Intelligence, Las Vegas, NV 637–643.
- D.J. Russomanno, C. Kothari and O. Thomas. 2005. “[Sensor Ontologies: From Shallow to Deep Models.](#)” Proceedings of the 37th Southeastern Symposium on Systems Theory, IEEE Press, Tuskegee, AL 107–112.
- O. Thomas and D.J. Russomanno. 2005. “[Applying the Semantic Web Expert System Shell to Sensor Fusion using Dempster-Shafer Theory.](#)” Proceedings of the 37th Southeastern Symposium on Systems Theory, IEEE Press, Tuskegee, AL. 11–14.
- O.A. Thomas and D.J. Russomanno. 2004. “[SWEXSYS: A Semantic Web Expert System Shell.](#)” Proceedings of the IASTED International Conference on Artificial Intelligence and Applications, part of the 23rd Multi-Conference on Applied Informatics, Innsbruck, Austria 240–245.

Workshops and Presentations

- Omoju Miller. 2017. “An introduction to Bagging Models.” Demystifying Deep Learning and AI, Noroff, Oslo.
- Jennifer Arguello, Tiffany Price, Alexis Martin, Frieda McAlear, Omoju Miller, Dan Garcia. 2015. “Engaging Underrepresented Youth in Computer Science.” Computer Science Teachers Association (CSTA) in Grapevine, TX.
- Omoju Miller. 2015. “Towards a Global Framework for Culturally Resonant Learning.” 2015 Sage Assembly in Paris, France.
- Omoju Miller and Oluwale Solana. 2014. “From San Francisco to Johannesburg, introducing girls to Computer Science in Industry supported programs.” 2014 Grace Hopper Conference in Phoenix, AZ.
- Daniel D Garcia, Brian Harvey, Tiffany Barnes, Dan Armendariz, Jon McKinsey, Zachary MacHardy, Omoju Miller, Barry Peddycord III, Eugene Lemon, Sean Morris, Josh Paley. 2014. “[AP CS Principles and the Beauty and Joy of Computing Curriculum.](#)” Proceedings of the 45th ACM Technical Symposium on Computer Science Education, 746–746.
- Brian Harvey, Daniel D Garcia, Tiffany Barnes, Nathaniel Titterton, Omoju Miller, Dan Armendariz, Jon McKinsey, Zachary Machardy, Eugene Lemon, Sean Morris, Josh Paley. 2014. “[Snap!\(Build your own Blocks\).](#)” Proceedings of the 45th ACM Technical Symposium on Computer Science Education, 749–749.
- Omoju Miller, Jordan Arnesen, Eric Chu, Grayson Flood, Kevin Funkhouser, Alex Greenspan, Daniel Hsu. 2013. “Hipopathy: A Computational Thinking Process to Encourage Empathy.” 2013 California Cognitive Science Conference, Berkeley, CA.

Essays and reviews

- Frieda McAlear, Omoju Miller, Dan Garcia, Alexis Martin. 2016. “[Equity in Computer Science: From Exposure to Entrepreneurship.](#)” Computer Science Teacher’s Association (CSTA) Voice, 9–10.
- Omoju Miller. 2014. “[Its Deeper than Rap, Toward Culturally Responsive CS.](#)” XRDS: Crossroads, The ACM Magazine for Students, 28–30.

Omoju Miller. 2013. “Winning with Both Sides of the Coin.” Coding Nation Report 6–7.

selected
conference
presentations
since 2012

Keynote, “Cognitive Apprenticeship - Experience in Open Source, Linux Conference Australia - Linux.conf.au, January, 2021.

Speaker, “Science in the Age of Data: Accelerating Human Progress.” JupyterCon, October, 2020.

Keynote, “Africa - The Next Frontier.” DLD Munich, Munich, January, 2020.

Speaker, “Why is machine learning seeing exponential growth in its communities?” O’Reilly TensorFlow World, Santa Clara, October, 2019.

Speaker, “AI at the Frontier: A Global Viewpoint.” Fortune Brainstorm Tech, July, 2019.

Keynote, “A new vision for the global brain: Deep learning with people instead of machines.” O’Reilly Velocity Conf, London, October 2018.

Speaker, “Opening Keynote - GitHub Universe.” GitHub Universe, San Francisco, October 2018.

Speaker, “Building Data Products at GitHub.” Pluralsight Live, Utah, August 2018.

Fireside Chat, Nairobi Women in Machine Learning. Nairobi, Kenya, June 2018.

Presenter, “All The Cool Kids, How Do They Fit In? Popularity and Demographic Biases in Recommender Evaluation and Effectiveness.” Papers We Love - San Francisco, California, April 2018.

Keynote panelist “Data Science: Past, Present, Future.” DataEngConf, California, April 2018.

Speaker “On learning AI: The Myth of Innate Ability in Tech.” TEDxSanFrancisco, California, October 2017.

Speaker “On learning AI: The myth of innate ability in tech.” Data Institute, California, October 2017.

Panelist “Black Work, Black Wealth, Black Futures.” Data For Black Lives, MIT, Massachusetts, November 2017.

Speaker “What Makes a Coder.” Etsy, New York, February 2017.

Panelist “Moral Machines: How Philosophy can help AI Decide Right from Wrong.” Grace Hopper Celebration of Women in Computing, Texas, October 2016.

Keynote “15+ Years of Learning Computational Intelligence.” Annual OUSD Dinner with a Scientist, California, May 2016.

Panelist “SPIE Women in Optics.” SPIE Photonics West Annual Conference, California, February 2016.

Speaker “Breaking Barriers: Changing the Landscape.” Andela, Lagos, Nigeria, January 2016.

Panelist “Behind the Click: Intersection of Women of Color in STEM and Social Justice.” Black Girls Code, California, December 2015.

Keynote “Moonshot Thinking.” Joint Board of Advisors Meeting, Purdue School of Engineering and Technology, IUPUI, Indiana, October 2015.

Keynote “Breaking Barriers: Changing the Landscape.” Youth Start Up Weekend at Castlemont High School, California, May 2015.

Speaker, “Breaking Barriers: Changing the Landscape.” Office of Institutional Diversity, Harvey Mudd College, California, December 2014.

Keynote, “Inventing the Mythical Creature: Or How to Stay, Lead, and Delight in Tech as a Woman.” Annual Celebration of the IU Center of Excellence for Women in Technology (CEWiT), Indiana, October 2014.

Speaker, “Made With Code.” Annual Dreamforce Developer’s Conference, California, October 2014.

Speaker, “Inventing the Mythical Creature: Or How to Stay, Lead, and Delight in Tech as a Woman.” Focus 100, New York, September 2014.

Presenter, “#ThisIsGrit.” White House Department of Education EdDataPalooza, Washington DC, January 2014.

Speaker, “Unintended Bias.” Departmental Heads Gathering, White House, Washington DC, February 2013.

Panelist, “Social Justice in the Age of Big Data.” Swinging and Flowing: Inclusion and Diversity in the Age of Data. The Data and Democracy Initiative @ CITRIS Berkeley, Berkeley, April 2012.

**grants,
honors,
& awards**

Member (Expert Network: AI), World Economic Forum, Davos, Switzerland, March 2017.

Bloomberg Beta Future Founder, Bloomberg Beta, California, 2014.

Winner, White House Dept of Edu EdDataPalooza, Washington DC, January 2014

Kapor Capital Fellows, California, 2012.

SESAME Graduate Division Fellowship, UC Berkeley, 2010–2011

Herff College of Engineering fellowship, Memphis, 2002–2006.

**press,
podcast,
& coverage**

Vanguard Nigeria, [YABATECH steps up AI education](#). April, 2026.

Africa Deep Tech Community, [Africa’s AI Moment - with Omoju Miller](#). April, 2026.

The Guardian Nigeria, [U.S. Consulate, YABATECH train 300 staff, students on AI](#). March, 2026.

BusinessDay Nigeria, [\\$700bn U.S. AI investment plan spurs Nigeria’s leapfrogging ambitions](#). February, 2026.

Vanishing Gradients Podcast, #25, [Fully Reproducible ML & AI Workflows with Omoju Miller](#). March, 2024.

Emerging with Jamal Robinson Podcast, [AI, Web3 CEO Decodes Her Career, Working at Google, GitHub and with Barack Obama](#). May, 2023.

Open||Source||Data Podcast (DataStax), [Web3 and Putting Reputation on Code with ML with Omoju Miller](#). May, 2023.

The Business Journal, [Startups to Watch: Fimio wants to help you trust crypto and Web3](#). January, 2023.

Neo & Noteworthy, [Fimio funding announcement \(\\$2.195M round\)](#). October, 2022.

Jupyter Blog, [Omoju Miller - JupyterCon 2020 Keynote Speaker](#). September, 2020.

TWIML Podcast, #313, [Machine Learning at GitHub with Omoju Miller](#). October, 2019.

DeepLearning.AI, [Working AI: At the Office with Senior MLE Omoju Miller](#). August, 2019.

Fortune, [Africa Is Tech’s Next Great Frontier, Github A.I. Expert Says](#). July, 2019.

Venture Beat, [GitHub wants AI to help developers code](#). October, 2018.

Harvard Business Review, [What Data Scientists Really Do, According to 35 Data Scientists](#). August, 2018.

DataFramed Podcast, #29, [Machine Learning & Data Science at Github \(with Omoju Miller\)](#). July, 2018.

The Observer, [Berkeley PhD's 4-Step Plan to a STEM Pipeline That Works for Everyone](#). February 16, 2017.

Stack Overflow Podcast , #91, [Can You Stump Nick Craver?](#). October 2016.

Science with Tom parody rap video, [Everybody's Got Questions \(Yup\)](#). May 2016.

JavaScript Air Podcast, [The Science of People in Tech](#). May, 2016.

HBCU to Startup Podcast, [Learners Guild, Investing in You to Code](#). March, 2016.

The Hanselman Minutes Podcast: Fresh Air for Developers, [Redesigning Computer Science 101 Education with Omoju Miller](#). August, 2015.

Pivot TV, [RoadTrip Nation: Omoju's Open Road](#). March, 2015.

#BITTechTalk, [African Americans on the role of Higher Education in Innovation](#). December, 2014.

NPR's All Tech Considered, [Fortune-Tellers, Step Aside: Big Data Looks For Future Entrepreneurs](#). October 5, 2014.

Berkeley Bytes, [Q&A with CS Ed Reformer and PhD Candidate Omoju Miller](#). March 11, 2014.