# **TEMINA MADON**

# SUMMARY

Current member of South Park Commons and editor of a forthcoming textbook on technology for emerging markets. Teaching at UC Berkeley School of Business. Previously served as business director of Atlas AI, a satellite analytics startup tracking economic indicators across the developing world. Co-founder of CEGA.org, a leading think tank at UC Berkeley that generates data, technology, and evidence to fight poverty around the world. Experience working with the World Bank, US and foreign governments, non-profits, and the tech sector on economic and technology policy. Subject matter expertise in agricultural productivity, financial inclusion, energy access, public health, governance, and machine learning.

# **EXPERIENCE**

2020-	<b>Professional Faculty – Haas School of Business, UC Berkeley</b> Teaching graduate students about Development Engineering, a new field at the intersection of development economics, technology design, and business.
2019-	Member – South Park Commons
¢,	South Park Commons (SPC) is a learning community in Silicon Valley that brings together technologists looking for their next venture and passionate about making a positive impact.
2018-2019	<b>Director of Business Development – Atlas Al</b> Atlas Al is a tech startup generating economic data and insights for emerging markets.
AtlasAI	<ul> <li>Developed business model and go-to-market strategy for enterprise SaaS product serving emerging markets. Guided Series A fundraise and pitched key investors.</li> <li>Evaluated market fit and built product strategy. Cultivated a diverse cohort of beta users, led user testing, worked with the product team on feature design and implementation.</li> <li>Created pipeline of 100+ customers for product release. Secured first paying customers.</li> <li>Built company strategy for open sourcing, data acquisition, and data security. Wrote multiple successful R&amp;D grant proposals to advance core technology.</li> </ul>
2008-2018	<b>Co-founder and Executive Director – Center for Effective Global Action, UC Berkeley</b> CEGA is a think tank that designs, rigorously tests, and scales technologies and policies that drive
CEGA	<ul> <li>sustainable development.</li> <li>Built a network of nearly 100 university faculty and 25 professional staff engaged in economic development research. Established CEGA as the West coast hub for global development research, with faculty from the University of California, Stanford, and beyond.</li> <li>Forged formal partnerships with foreign governments, development banks, USAID, non-profits, and the private sector to test and scale new technologies and policies. Scale-up of the resulting evidence has reached millions of people throughout the world.</li> <li>Fostered an engaging, exciting work culture that values creativity, entrepreneurship, growth, and results. Led the team to raise nearly \$60M for research and scale-up activities, with funding from governments, foundations, corporations, and private donors.</li> </ul>

#### 2012-2018

# DEVELOPMENT IMPACT LAB

#### Managing Director – Development Impact Lab, UC Berkeley

The Development Impact Lab is a CEGA initiative advancing global economic development through applications of science and technology.

- Built a \$30M portfolio of research projects, grant competitions, and training activities in the new field of Development Engineering, which integrates insights from economics and the social sciences into the design of scalable technologies for low-resource communities.
- Fostered partnerships with local technology companies (like Planet, Visa, and GiveDirectly) to improve the measurement of economic indicators in developing countries, leveraging advances in remote sensing and AI.
- Launched PhD courses and the academic journal *Development Engineering* to recruit top engineers, economists, and other researchers into the field of "technology for development".

#### 2008-2012



**Founding Executive Director – Center for Emerging & Neglected Diseases, UC Berkeley** CEND helps academic scientists make innovative contributions to the fight against infectious disease, with a focus on the diseases of poverty.

- Advanced the center from idea to action, building a vibrant research network through scientific events, competitions, and exchanges with scientists from developing countries. The network is comprised of multi-investigator teams focused on global health diagnostics and drug discovery, drawing faculty members from UC Berkeley, UCSF, Stanford, and research organizations in Asia and Sub-Saharan Africa.
- Worked with faculty leadership to attract a \$20 million working endowment.
- Established undergraduate, PhD, and postdoctoral training programs in infectious disease research, with support from NIH, industry (Novartis), and foundations.

#### 2006-2008



#### Science Policy Advisor – Fogarty Center, U.S. National Institutes of Health (NIH), MD

Fogarty advances the mission of the NIH by supporting global health research and building partnerships between research institutions in the U.S. and abroad.

- Analyzed international financial flows for all of NIH, with a focus on investments in developing countries. Authored report and led development of systems for better reporting of international investments.
- Spearheaded an effort to advance implementation science across the agency. Organized scientific convenings and authored position papers to guide the field.

#### 2005-2006



#### Science and Technology Policy Fellow – U.S. Senate, Washington, DC

The AAAS Science and Technology Policy Fellowship provides U.S. government agencies with the expertise and analytical skills of scientists and engineers.

- Served on the health subcommittee of the U.S. Senate Health, Education, Labor, and Pensions Committee, under the leadership of former Senator Edward Kennedy.
- Advanced legislation and conducted investigations for a portfolio of public health challenges: incentives for neglected disease innovation, global infectious disease surveillance, intellectual property and access to essential medicines, public health preparedness, and health IT.
- Researched policy solutions, drafted and negotiated legislation, authored issue papers and reports, wrote speeches, analyzed Federal budgets, and liaised with WHO, NIH, CDC, industry, academics and advocates to define evidence-based positions for the office.

#### 2004-2005

#### Health Services Analyst – UC Berkeley

Berkeley

- Designed and fielded surveys of Berkeley undergraduate and graduate students to understand health care preferences and reveal unmet needs.
- Analyzed health utilization data to support redesign of University Health Services, with a focus on meeting student demand for mental health and preventive care.
- Developed and implemented a campaign to raise student fee revenues, to finance essential health service improvements, especially in the area of mental health.

## EDUCATION

2004	Ph.D., Visual neuroscience - University of California, Berkeley Studied signal processing mechanisms in the early visual system, drawing on tools from information theory, digital signal processing, neuroscience, and biophysics.
1998	S.B., Chemical engineering - Massachusetts Institute of Technology Minor in biomedical engineering.

### BOARDS

2019-	Advisor, Atlas Al
2019-	Director, Non-profit Board, Take Back the Court Member, Advisory Board, Center for Effective Global Action Co-Chair, Advisory Board, SDG Partnership Platform, United Nations Kenya
2018-	Member, Advisory Board, Network of Impact Evaluation Researchers in Africa
2017-2019	Member, Board, Agralogics

# **PROFESSIONAL SERVICE**

Ad hoc	Reviewer for the World Bank (DIME), International Initiative for Impact Evaluation (3ie), the Sloan Foundation, The Lancet, Princeton University Press.
2014-2020	Advisory Board, Atlas Journal (Elsevier)
2014-2016	Advisory Committee, Scholarly Publishing and Academic Resources Coalition
2011-	Judge and Reviewer, American Association for the Advancement of Science (Science and Technology Policy Fellowship, GIST Tech-I Competition)
2011-2015	Judge and Mentor, Big Ideas contest, UC Berkeley
2010-2012	Technical Advisor, World Health Organization (WHO-TDR)
2011	M&E Working Group, Global Alliance for Clean Cookstoves

# PUBLICATIONS

## **Policy & Blogs**

T Madon. (2019) Designing technologies to promote food security and agricultural transformation. Atlas AI, <u>https://medium.com/atlasai/agra-and-atlas-ai-partner-ea0ed6786ea9</u>

- T Madon. (2018) Machines fighting poverty? Center for Effective Global Action, <u>https://medium.com/center-for-effective-global-action/machines-fighting-poverty-ded0cbae6ae9</u>
- M Jarvis, T Madon. (2018) Transparency and Accountability Initiative, https://www.transparency-initiative.org/uncategorized/3656/governing-machines/
- M Shah, A Sellman, T Madon. (2016) Behavioral Economics and Reproductive Health Decision-Making. BehavioralEconomics.com, https://www.behavioraleconomics.com/behavioral-economics-and-reproductive-health-decision-making/
- T Madon. (2015) Incentives for open science: New prizes to encourage research integrity and transparency in social science. LSE Impact of Social Sciences blog, http://blogs.lse.ac.uk/impactofsocialsciences/2015/05/21/incentives-for-open-science-cash-prizes-bitss/
- C Christiano, PJ Gertler, T Madon. (2015) A big data future for financial inclusion. The Guardian, <u>https://www.theguardian.com/visa-partner-zone/2015/apr/14/big-data-financial-inclusion-findex-world-bank-uc-berk</u> <u>eley-cega</u>
- T Madon, S Davis. (2015) Who will build the resilience of development agencies? DevEx blog, https://www.devex.com/news/who-will-build-the-resilience-of-development-agencies-86640
- T Madon (2015) A giant leap for science. Berkeley blog, http://blogs.berkeley.edu/2015/06/25/a-giant-leap-for-science/
- T Madon (2015) Open Data and the Social Sciences. OpenCon Community Podcast, https://youtu.be/uMgB8qvf\_Ow
- L Ashton, N Giridhar, SJ Holcome, T Madon, E Turner. (2015) A review of behavioral economics in reproductive health. CEGA White Paper, University of California.
- T Madon, KJ Hofman, B Zuckerman, RI Glass. (2007) Global Research Partnerships: Foreign Investment by the U.S. National Institutes of Health. Global Forum for Health Research, Beijing, China; 11/2007.

#### Academic (https://scholar.google.com/citations?user=2jeGseYAAAAJ)

- T Madon, AJ Gadgil , PJ Gertler. (2016) Introduction: Development Engineering. 1:1–3. doi:10.1016/j.deveng.2016.03.001B.
- B Nosek et al. (2016) Transparency and openness promotion (TOP) guidelines. Open Science Framework, https://doi.org/10.1126/science.aab2374
- B Nosek et al. (2015) Promoting an open research culture: Author guidelines for journals could help to promote transparency, openness, and reproducibility. Science. 384(6242):1422-1425
- AJ Gadgil, T Madon. (2015) Tools to Measure the Development Impact of Innovations. In Technologies for Development: What is Essential? Chapter 16, Publisher: Springer. Editors: S Hostettler, E Hazboun, JC Bolay.
- T Madon. (2015) *Implementation Science: the path from innovation to impact.* Public Health Research Methods, Chapter: 23, Publisher: SAGE Publications, Editors: Greg Guest, Emily E. Namey, pp.707-722
- L Nilsson, T Madon, SS Sastry. (2014) Toward a new field of Development Engineering: Linking technology design to the demands of the poor. Procedia Engineering 78, 3-9.
- E Miguel, C Camerer, K Casey, J Cohen, KM Esterling, A Gerber, R Glennerster, DP Green, M Humphreys, G Imbens, G Laitin, T Madon et al. (2014) Promoting Transparency in Social Science Research. Science. 643(6166): 30-31.
- A Mwisongo, L Wang, T Madon, S Owusu-Agyei and MÁ González Block. (2011) Current and foreseeable themes in implementation research for disease control. Chapter 9, Implementation research for the control of infectious diseases of poverty. Geneva: World Health Organization.
- T Madon, KJ Hofman, L Kupfer, RI Glass. (2007) Public Health: Implementation Science. Science. 318(5857):1728-1729.
- J Hyun, B Quinn, T Madon, S Lustig. (2007) Mental Health Need, Knowledge, and Utilization of Counseling Services Among International Graduate Students. J. of Am. Coll. Health. 56(2):109-118.

- J Hyun, B Quinn, T Madon, S Lustig. (2006) Graduate Student Mental Health: Needs Assessment and Utilization of Counseling Services. J. Coll. Stud. Dev. 47(3):247-266.
- T Madon. (2004) Reproducibility and Patterning of Retinal Ganglion Cell Spike Trains Elicited by Natural Signals. Doctoral dissertation, University of California, Berkeley.

## PRESENTATIONS

- Poster Presentation, "Building the right infrastructure and relationships for research translation," at AGU Fall Meeting 2020, December 2020, online.
- Panel Presentation, "The Digital Transformation of Societies: Addressing Technological Disruption," at AAAS Annual Conference, February 14-16, 2020 in Seattle, WA.
- Invited Talk, "Enabling Data-Driven Innovation in the Developing World," Development in the Data Economy, September 13, 2019 at Berkman Klein Center, Harvard University.
- Invited Talk, "Scaling Impact at the Intersection of Technology and Global Development", March 22, 2019 at Stanford University.
- Invited Panel, "Data Institute SF Annual Conference", March 10-12, 2019 at University of San Francisco Data Institute, USA.
- Invited Panel, "UNESCO Technologies for Development Conference," June 27-29, 2018 at Ecole Polytechnique Federal de Lausanne, Switzerland.
- Invited Panel, "UNESCO Technologies for Development Conference," May 2-4, 2016 at Ecole Polytechnique Federal de Lausanne, Switzerland.
- Invited Talk, "Humanitarian Innovation: Sustainability & Scale," February 23, 2016 at Center for IT Research in the Interest of Society (CITRIS), UC Berkeley

Presentation, "International Conference on Family Planning 2015," January 25-28, 2016 in Nusa Dua, Indonesia.

Presentation, US Agency for International Development Global Development Lab, Brown Bag Seminar, February 12, 2015 in Washington, DC.

Guest lecturer, Course 2.S999 - Global Engineering (Professor Amos Winter), October 8, 2014 at MIT.

Invited talk, "World Bank Development Impact Evaluation (DIME) AADAPT Conference," June 16-18, 2014 in Kigali, Rwanda.

Panel Presentation, "Humanitarian Technology: Science, Systems and Global Impact". May 13-15, 2014 in Boston, MA.

- Invited Panel, "UNESCO Technologies for Development Conference," May 4-6, 2014 at Ecole Polytechnique Federal de Lausanne, Switzerland.
- Invited poster, "Consortium of Universities for Global Health Conference," March 14-16, 2013 in Washington, DC. Presentation, BRAC Research and Evaluation Division, January 16, 2012 in Dhaka, Bangladesh. Invited talk, UN-USA East
- Bay Chapter, October 23, 2011 in Berkeley, CA. Invited talk, "Measuring enhanced outcomes and impact of preventive chemotherapy", Bill & Melinda Gates Foundation, September 1-2, 2011 in Seattle, WA.

Presentation, "Conference on the Science of Dissemination and Implementation," March 21-22, 2011 in Bethesda, MD. Invited talk, Skoll Foundation, February 8, 2011 in Palo Alto, CA.

Presentation, "Consortium of Universities for Global Health Conference," September 19-21, 2010 in Seattle, WA.

## REFERENCES

Edward Miguel Professor of Economics UC Berkeley emiguel@berkeley.edu

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