

Dr Caspar Addyman

Developmental Scientist · AI Product Builder

Writer · Creator · Baby Laughter Expert

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[Brixton, London](#)



Who I Am

As a scientist I study why babies laugh and why parenting matters. As a technologist I build AI tools that help parents and children thrive together. As a creator I write and perform for adults and babies. After a decade pricing derivatives at RBS, Deutsche Bank and Barclays Capital, I retrained as a developmental psychologist (PhD Birkbeck, 2009) because infant development turned out to be a far more interesting research problem than interest rate volatility. I bring an unusual combination of quantitative rigour, twenty years of infant science, and hands-on AI product building. I am looking for mission-driven organisations working at the intersection of early child development and technology. I want to work with people who believe that getting the early years right actually matters.

What I Can Do

Technical

Python · Generative AI / LLMs · Multimodal Machine Learning · Computer Vision · FastAPI · Docker · TypeScript · R · SQL · Azure

Science & Domain

Early Childhood Development · Affective Computing · Language Acquisition · Infant Laughter · Parental Engagement · Positive Psychology · Research Design

Strategy & Leadership

AI Product Strategy · 0-to-1 Product Development · Science Communication · Grant Management · Startup Advisory · International Supervision

Experience

Chief Insights Officer Early Ideas Ltd (PlayTandem) · London · 2024–present

PlayTandem: science-backed co-reading app using generative AI to create personalised storybooks and activities that connect parents and young children — tech that is meaningful in tandem.

- Lead all data science work, building benchmarking tools and methodologies within our platform and systematic evaluation of parenting advice in foundation models.

- Responsible for evidence-based content design; ensuring our AI personalization engine is grounded in real developmental science, not just engagement metrics.
- Rapid build and deploy of production ready internal tools for data evaluation, on-brand content creation, market intelligence reporting
- First hire in award winning early stage start up with broad role

Extraordinary Associate Professor Stellenbosch University (ILCHR) · South Africa · 2022–present

[Global Parenting Initiative](#) (GPI) — **LEGO Foundation**-funded (£400k) *Lead a MLproject using video analysis to measure playful parenting across low- and middle-income countries.*

- Supervise two PhD students working on application of machine learning methods to real world challenges in early child development.
- Built **VideoAnnotator**: open-source Python/FastAPI pipeline extracting pose, facial emotion, gaze and speech from parent–child videos. Plus **VideoAnnotationViewer**, a [web front end in Node.js](#) (github.com/InfantLab/VideoAnnotator)
- Published 2× Springer LNCS papers GRU/LSTM ensemble models predicting mother–infant synchrony from video (ICANN 2023, EANN 2024).

Lecturer & InfantLab Director Goldsmiths, University of London · 2015–2022

- Director the InfantLab — home of the world of baby laughter.
- Secured £500k+ in grants (Royal Academy of Engineering, British Academy, ESRC, EU Horizon 2020). Supervised 3 PhD students and 20+ postgrad students.
- Collaborated with Grammy-winning artist Imogen Heap to create ‘The Happy Song’ (2016) — scientifically designed to make babies happy. BBC, Guardian, New York Times coverage.
- Author of ‘The Laughing Baby’ (Unbound, 2020) and the Babies Laugh picture book series (4 titles, Pan Macmillan 2023–24).

Post-doctoral Researcher Birkbeck Babylab / LEAD-CNRS France · 2009–2014

- Published 10 peer-reviewed papers on early concept learning, the foundations of language, time perception. Working in world’s largest infant research lab.

Earlier Career — City of London

Quantitative Developer & Options Trader Morgan Grenfell · LIFFE · RBS · Deutsche Bank · Barclays Capital · Credit Suisse · 1995–2005

- Ten years in front-office trading and quantitative development: OTC options pricing models, derivatives analytics, risk systems. Gave up a genuinely well-paid career because babies are more interesting than market and trader volatility.

Education

PhD Psychology	Birkbeck, University of London	2009
BSc Psychology — First Class	Birkbeck, University of London	2005
BA Mathematics	Peterhouse, Cambridge	1996

Selected Publications

H-index: 12 · 18 peer-reviewed papers · 6 books · full list: babies.lo/

Uwerikowe, I.E., Stamate, D., **Addyman, C.**, Lachman, J., & Tomlinson, M. (2026). Selecting Optimal Facial Emotion Recognition Models for Naturalistic Caregiver–Child Interactions: Addressing Poor Generalizability in Global Majority Data. TechRxiv preprint.

Stamate, D., Davuloori, P., ..., **Addyman, C.**, & Tomlinson, M. (2024). Ensembles of Bidirectional LSTM and GRU Neural Nets for Predicting Mother–Infant Synchrony in Videos. EANN 2024, Springer LNCS.

Addyman, C. (2020). *The Laughing Baby: The extraordinary science behind what makes babies happy.* Unbound.

Addyman, C. & Simeone, A. (2023–24). *Babies Laugh series (4 titles).* Pan Macmillan.

Selected Grants & Industry Contracts

2022–2027 LEGO Foundation — Machine Learning for the Global Parenting Initiative. £400,000. Co-Investigator

2019–2020 Royal Academy of Engineering — Frontiers of Development. £19,493. Principal Investigator

2016 Research Contract, Procter & Gamble Europe. £16,845

2014–2015 Infant Music Consultancy, Cow & Gate / Danone. £22,500

2010–2012 NHS Enterprise East SBRI — Parkinson’s medications management. £568,500. Scientific Lead