# Andreas Bang Leed

**PhD Fellow in Economics**, Aarhus University · **Head of Data Science**, Oxford Global Projects

andreas@leed.dk leed.dk linkedin.com/in/andreasleed 0000-0002-6771-8266 SSRN

I measure what others leave to guesswork, from the cost and risk of large infrastructure projects to the price of nature. My research in economics at Aarhus University concerns how to choose the right projects and make the best use of public resources, including how to measure and value nature. I am co-author of *How to Measure Anything in Project Management* (Wiley, 2025) and lecture in master's courses on cost-benefit analysis. Since 2019 I have advised governments, multilateral organisations and consultancies in more than 25 countries on the likely final cost, duration and risk of major projects. For the Hong Kong Development Bureau I worked on the AI early warning in the system that monitors its public-works projects.

## Experience

2025– **PhD Fellow in Economics** AARHUS UNIVERSITY Sep 2025 – 2028 (expected)
Research at the Department of Economics and Business Economics on how to choose the right projects and make the best use of public resources. One strand examines how noise in cost and benefit estimates affects which projects are selected and how the selected projects perform against those estimates. Another estimates how the ecological quality of nearby nature is reflected in Danish house prices, so that nature can be valued in cost-benefit analysis.

2021– **External Examiner** POLITICAL SCIENCE & SOCIAL DATA SCIENCE Sep 2021 – Present

2019– **Head of Data Science** OXFORD GLOBAL PROJECTS May 2019 – Present
Lead the data science team, which produces cost and schedule forecasts, quantitative risk analysis and AI-based early warning of cost overrun and delay for major projects worldwide. Clients include governments, multilateral organisations and consultancies.

2018–19 **Business Analyst & Consultant** IMPLEMENT CONSULTING GROUP Feb 2018 – Apr 2019
Strategy and analytics consulting for public and private sector clients in Denmark.

2017–18 **Research Assistant** UNIVERSITY OF OXFORD Saïd Business School · Jan 2017 – Feb 2018
Supported research on megaproject management and performance.

2014–16 **Research Assistant** AARHUS UNIVERSITY Dec 2014 – Dec 2016

## Education

exp. 2028 **PhD in Economics** AARHUS UNIVERSITY Sep 2025 – 2028 (expected)

2019 **MSc in Political Science** AARHUS UNIVERSITY

2016 **BSc in Political Science** AARHUS UNIVERSITY

## Teaching

2026 **Cost Benefit Analysis** AARHUS UNIVERSITY Master's course, 10 ECTS · MSc International Economic Consulting · Department of Economics and Business Economics · Autumn 2026
Lecture in four of the fourteen weeks as one of three lecturers, on uncertainty and risk, the social cost of carbon, biodiversity and existence value, and the politics of cost-benefit analysis. The course is taught in English.

2025 **Cost-benefit analyser i den offentlige sektor** AARHUS UNIVERSITY Cost-benefit analysis in the public sector · Master's course, 10 ECTS · Department of Political Science · Autumn 2025
Taught five sessions as one of three lecturers, with one session each on uncertainty and risk, on the social cost of carbon, on biodiversity and on infrastructure, and a fifth session run as a case game. The course was taught in Danish.

## Selected impact

**UK transport appraisal.** Co-authored the report for the UK Department for Transport that updated the evidence behind the optimism bias uplifts, the percentages added to base cost estimates in transport appraisals.

**Hong Kong early warning.** Worked on the artificial intelligence in the Project Supervision System (PSS), which the Hong Kong Development Bureau uses to monitor its public-works projects and to warn senior management of projects at risk of cost overrun or delay while intervention is still possible.

**Global advisory.** Advised governments, multilateral organisations and consultancies across six continents, on projects from nuclear energy and transport to renewable power and artificial intelligence.

## Publications and working papers

in prog. Leed, A. B. *The Price of Biodiversity: Hedonic Evidence from Danish Housing Markets.* Working paper, Aarhus University.

2026 Leed, A. B. *Noise, Selection, and the Illusion of Bias: How Unbiased Estimates Can Produce Systematic Cost Overruns.* Working paper, Aarhus University. Earlier version posted as SSRN Working Paper No. 6429358, subtitled *Why Unbiased Estimates Produce Systematic Cost Overruns*.

2026 Leed, A. B. *How to Measure Your Projects More Effectively.* APM Project Journal, Spring 2026 (practitioner article).

2025 Hubbard, D. W., Budzier, A. & **Leed, A. B.** *How to Measure Anything in Project Management.* Wiley.

2025 Greig, C., Techau, M., **Leed, A.** & Budzier, A. *Maintaining Capital Discipline in the Rush to Net-Zero Energy Systems.* iScience, 28(4): 112241.

2022 Flyvbjerg, B., Budzier, A., Agard, K. & **Leed, A.** *AI in Action: How the Hong Kong Development Bureau Built the PSS, an Early-Warning-Sign System for Public Works Projects.* Hong Kong Development Bureau (PSGO).

2021 Budzier, A. & **Leed, A.** *Updating the Evidence Behind the Optimism Bias Uplifts for Transport Appraisals.* UK Department for Transport.

2018 Budzier, A., Flyvbjerg, B., Garavaglia, A. & **Leed, A.** *Quantitative Cost and Schedule Risk Analysis of Nuclear Waste Storage.* SSRN Working Paper No. 3303410.

## Selected talks

2026 **The Oxford Megaproject Summit 2026** OXFORD, UNITED KINGDOM
"The State of Play: Data on Megaproject Performance" and "The Outside View in Practice". Two sessions at a two-day summit for senior leaders of major capital programmes, held at St Hugh's College. The first reviewed how major projects have performed and the uncertainty that long-lived assets face from climate, nature, artificial intelligence and geopolitics. The second showed how forecasts are derived from data on completed projects with reference classes, driver analysis and machine learning, and how they are updated during delivery.

2026 **Megaprojekter og store bygge- og anlægsprojekter – læring og erfaringer** COPENHAGEN, DENMARK
"How to Measure Anything in Project Management". Conference held by Bygherreforeningen (Danish Association of Construction Clients) at Dansk Arkitektur Center on lessons from megaprojects.

2026 **Projektforum 2026** NYBORG, DENMARK
"How to Measure Anything in Project Management". Tools track of the conference held by Dansk Projektledelse and Dansk IT.

2026 **Concept Symposium** OSLO, NORWAY
"Measuring What Matters". The talk presented measurement as the reduction of uncertainty in project decisions and reviewed the evidence on which project methods improve outcomes, with an example from my current research on the value of biodiversity. Hosted by the Norwegian Ministry of Finance and organised by the Concept Research Programme at the Norwegian University of Science and Technology (NTNU).

2026 **Danish Environmental Economics Conference** SKODSBORG, DENMARK
"The Price of Biodiversity: Hedonic Evidence from Danish Housing Markets". Results from my current research on what homebuyers pay for the ecological quality of nearby nature, presented in the biodiversity session organised by the Danish Economic Councils (De Økonomiske Råd).

2026 **Folkemødet** ALLINGE, DENMARK
"Megaprojekter i Danmark – hvor gode er vi egentlig?" (how good Denmark is at megaprojects). Panel debate with directors from By & Havn, Metroselskabet and Region Sjælland at Denmark's annual democracy festival.

2026 **Ledelseskonferencen** ODENSE, DENMARK
"Evidensbaseret ledelse: Sådan måler du det, der betyder noget" (evidence-based management and how to measure what matters). Public-sector leadership conference.

2025 **Project Controls Expo** LONDON, UNITED KINGDOM
"How to Measure Anything in Project Management".

2024 **Machine Learning Week Europe** MUNICH, GERMANY
"Guarding Public Works Projects with an Early Warning System for the Hong Kong Development Bureau".

## Research presentations

2026 **DGPE Workshop 2026** KNEBEL, DENMARK
"The Price of Biodiversity: Hedonic Evidence from Danish Housing Markets". Workshop of the Danish Graduate Programme in Economics at Fuglsøcentret, 6 November 2026.

2026 **Department seminar** AARHUS UNIVERSITY
"The Price of Biodiversity: Hedonic Evidence from Danish Housing Markets". Seminar of the Department of Economics and Business Economics, 30 October 2026.

## Expertise and languages

Econometrics & Statistics · Cost & Schedule Forecasting · Risk Quantification · Monte Carlo Simulation · Bayesian Statistics · Machine Learning & AI · Cost-Benefit Analysis · Whole-Life Economics & Discounting · Fat Tails & Climate Risk · Environmental Economics & Nature Valuation · Reference Class Forecasting · Calibration & Value of Information · Decision Support · Python · R

**Languages.** Danish and English, both used in teaching and in presentations.

A fuller account of roles, clients and research is on the About page. Publications with links are on the Publications page. A longer selection of public talks is on the Speaking page. Last updated November 2026.