# MARK DIXON

+46 703 39 64 01 | mark@dixon.se | linkedin.com/in/dixon.se

### **OBJECTIVE**

From building real-time physics engines to shaping climate tech policy—my career has been driven by curiosity across the full stack of technology and human systems. After helping scale ClimateView from idea to Series A as CTO, I'm now exploring how AI and open science can accelerate climate action as ClimateView's CSO.

Ready to bring this systems-thinking approach to teams passionate about using technology as a force multiplier for positive change.

## **EDUCATION**

**Honours in Information Technology (Honours)**, Australian National University

First class honours.

Bachelor of Information Technology, Australian National University

1994 - 1996

Commerce (Information Systems), Curtin University

1993

### **SKILLS**

Mgmt Start-ups, Product Management, Dev Management, C-level Management

Code Python, C/C++, Julia, C#, TypeScript

Tech Unix (Linux/BSD/IRIX), Windows, Django, Wagtail, TypeScript, LaTeX, Claude Code

Text Emacs, org-mode, Jupyter/Marimo, Markdown, Zotero, Readwise Reader

GitHub https://github.com/nitwit-se

### **EXPERIENCE**

## Chief Science Officer, ClimateView AB

May 2024 - present

Worked initially as advisor / staff engineer during CTO hand-over period. Currently CSO responsible for research, prototyping, modelling and over-all scientific rigour of ClimateView and the Transition Element Framework (https://transitionelements.org and https://github.com/nitwit-se/transition-element-framework).

CLIMATE CHANGE MITIGATION · CLIMATE ACTION PLANNING · DATA SCIENCE

LARGE LANGUAGE MODELS (LLM) · MODEL CONTEXT PROTOCOL (MCP) · JULIA · PYTHON · MARIMO · CLAUDE CODE

### IT Consultant / Owner, Nitwit AB

2017 - 2024

Freelance consultant specialising in CTO (fractional or as-a-service) and advisory roles in startup companies.

Business Strategy  $\cdot$  Entrepreneurship  $\cdot$  AI / Large Language Models (LLM)  $\cdot$  Software Development

#### Fractional CTO, ClimateView AB

2018 - 2024

As a hands-on CTO I took ClimateView AB from a 3-person startup to successful series-A round and subsequent recruitment of a full-time CTO.

Python · Julia · C# / .NET Core · TypeScript · DevOps · Data Science · Data Structures · Algorithms · Modeling

# Python Developer, NextLVL Stockholm AB

2017 - 2022

As a consultant developer I built a modern Learning Managemnt System (LMS) written in Python/Django.

Python DevOps AWS EC2 / Elastic Beanstalk

## Python Developer / Agile Coach, Motivation Media Group AB

2017 - 2018

Consultant software developer and agile coach at Motivation.se, I developed the new Motivation.se 2.0 platform in Wagtail, a rewrite of the original PHP platform.

AGILE METHODOLOGIES PYTHON WAGTAIL

Teacher, Nackademin AB

2017

Internet of Things program at Nackademin, 3 courses (C/C++ programming, OOP and Algorithms & Data Structures).

Teaching · Data Structures · Algorithms · Object Oriented Programming

# Product Manager, Ping Pong AB

2013 - 2017

Initially a consultant scrum master, subsequently 1 year as development manager for 20 engineers and then 3 years as product manager. Ping Pong AB developed SaaS LMS tools for schools and universities in Sweden.

AGILE METHODOLOGIES · SCRUM / CERTIFIED SCRUM MASTER (CSM) · LEARNING MANAGEMENT SYSTEMS (LMS)

### Software Engineer, Research In Motion

2012 - 2013

Worked as consultant in a team of 9 developers based in Stockholm, developing the media applications for RIM's new BB10 OS.

Python Adobe Air C++ Qt Cascade 4

### Co-founder / CTO, Nordic River AB

2007 - 2012

CTO responsible for devops, backend infrastructure and algorithms for document change analysis. Adobe Flash UI editor for visualising and merging changes; building desktop, web and iOS-based tools.

Python · Adobe Flash/Flex/Air · ActionScript · C++ · Data Structures · Algorithms

## Co-founder / CTO, SenseGraphics AB

2004 - 2007

Worked on the design and development of H3D API, an open source 3D graphics library for development of stereoscopic VR applications (see www.h3dapi.org)

PYTHON · C/C++ · OPENGL · VRML/X3D · OPEN SOURCE

Developed and optimised a real-time physics library (C++) providing high performance (100Hz) 3D haptic simulation. Team lead for the core API team, subsequently CTO for the company during 2003-2004.

PYTHON · C/C++ · OPENGL · VRML · HAPTICS · ALGORITHMS

### Research Developer, CSIRO Australia

1998

Research developer at the Australian CRC for Advanced Computational Systems (ACSys) and CSIRO in the Virtual Environments research group, developing SGI / Irix based VR applications.

PYTHON · C/C++ · OPENGL

### RECENT PUBLICATIONS

**Designing for Delivery (2025)** Co-authored a systems-based planning method ("Dual Lens of Transition Planning") to help cities design and deliver fundable climate transition strategies, aligning ambition with investment-ready delivery through structured modelling, strategic interventions, and early indicators of progress. Available here.

Standardising Climate Mitigation: The Transition Element Framework (2024) Led development of the Transition Element Framework (TEF), a comprehensive methodology that transforms IPCC climate science into practical implementation tools, facilitating data-driven climate action planning for municipalities and regions globally. Available here.

Data-Driven Transitions: A co-created methodology (2024) Co-authored methodology white paper establishing a data-driven framework for climate transitions, integrating physics, behavioral science, and economics to help 230+ municipalities create actionable net-zero pathways through the ClimateView Platform. Available here.

### **PATENTS**

- Computational modeling, climate plan scoring, and data tagging US20230169231A1
- Method and system for harmonization of variants of a sequential file US8010507B2
- Method and system for facilitating the examination of documents US8209605B2

#### EXTRA-CURRICULAR ACTIVITIES

• Running a small publishing house (Nitwit Förlag) on a hobby basis, working with typesetting, automation, and distribution; because it is creative, fun and... I love books.