John Walley

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⚙ johnwalley

Senior software engineer with deep experience building data-intensive and performance-critical web applications, specialising in data visualisation and complex UI systems. Strong background in TypeScript, React, and modern frontend architecture, with a track record of designing maintainable systems, improving developer experience, and tackling hard technical problems. Comfortable operating as a senior individual contributor, influencing technical direction, mentoring engineers, and collaborating closely with product and design to deliver high-quality outcomes.

Experience

Cambridge Intelligence   *June 2025–Present*

Software Developer

Senior engineer working on high-performance data visualisation tools used by analysts to explore complex graph, temporal and geospatial data. Contributing across product architecture, developer experience, and performance critical UI components.

Mulberry House Software   *May 2016–June 2025*

Founder & Principal Engineer

- Designed and delivered data-driven web applications and visualisation tools across multiple industries.
- Built a production floor-planning application in collaboration with [Reno] ((https://www.renovatewithreno.co.uk/), a UK home-renovation startup.
- Designed visualisation tools for the pensions industry in partnership with Financial Canvas.
- Created and maintained open-source data-visualisation libraries (Allotment and Pennant) with 80,000+ weekly downloads, used by the Vega decentralised derivatives trading network.
- Founded and grew a consultancy, leading technical delivery while remaining hands-on with architecture and implementation.

Redgate

July 2015–May 2016

Trainee Product Manager

- Improved visibility and adoption of a newly acquired database deployment tool.
- Introduced in-product analytics to support data-driven product decisions.
- Worked closely with UX and engineering to prioritise features and improve user experience.

Redgate

June 2014–July 2015

Software Developer

Developed solutions to streamline SQL Server database deployment for users of popular release management tools.

Sungard

March 2012–May 2014

Software Developer

- Contributed to a scalable framework powering a high-performance risk analytics service.
- Developed a tracing just-in-time compile enabling C# financial models to run efficiently on GPUs.

Earlier Career

2004–2012

Held technical roles spanning high performance computing, applied research, and customer-facing engineering, including:

- High Performance Computing Developer at Fidelity
- Application Engineer at MathWorks (UK technical contact for parallel computing tools)
- Research Scientist at QinetiQ, working on multi-sensor fusion, object tracking, and stealth technology

Skills

Languages:
TypeScript, JavaScript, CSS, C#, MATLAB

Frontend & visualisation:
React, HTML Canvas, Web Workers, D3, high-performance rendering, large-scale data visualisation

Platform & tooling:
Node.js, Next.js, Astro, Vite, Webpack, pnpm, git, monorepos

Specialised expertise:
Data visualisation, API design, data analysis

Soft skills:

Technical leadership, decision-making, mentoring, cross-functional work, product focus, architecture reviews, engineering standards, technical communication, public speaking

Education

University of Oxford   *2002–2003*

MSc in Mathematical Modelling and Scientific Computing

University of Cambridge   *1999–2002*

BA in Mathematics