BENJAMIN HODGSON

https://www.benjamin.pizza

EXPERIENCE

Stack Overflow

Staff Software Developer	*2021–*
Senior Software Developer	*2018–2021*
Software Developer	*2016–2018*

Stack Overflow is the world's largest repository of programming knowledge and community of software developers. I am a technical lead on Stack Overflow's Reach & Relevance team, working primarily on Stack Overflow Talent, a developer hiring product.

- I've served as the lead developer on a number of large and challenging projects, involving complex implementation work, intra- and inter-team project management, and collaboration with designers, product managers, and data scientists. These include:

  - A major redesign of Stack Overflow's Jobs product, resulting in a 35% increase in job views and a 9% increase in job applications.

  - New reporting tools to give employers insight into the performance of their hiring efforts.

  - Lately, I have been working on our plans to sunset parts of Stack Overflow's hiring products.

- I'm a consistent advocate for performance, scalability, maintenance, and resolving technical debt.

  - I designed, implemented, and delivered major architectural improvements to Stack Overflow's job search algorithm. My work resulted in a 100-fold performance improvement to the core algorithm, allowing the product to scale to millions of jobs and enabling valuable syndication partnerships with other job boards.

  - I personally led the engineering department in transitioning our entire front-end codebase to TypeScript and ES Modules. I rapidly trained myself on Webpack, designed and communicated a plan to transition the codebase, modernised Stack Overflow's JavaScript build pipeline and localisation tools, and contributed a number of features and bug-fixes to upstream open source libraries.

  - I designed, pitched, implemented and documented a number of large-scale simplifications to Talent's 13-year-old data model.

- As my team's Tech Lead, I work especially closely with product managers and designers to manage the team's work stream and identify potential issues in advance. I am also the point of contact for other teams and departments when coordinating cross-team projects.

- I'm a dedicated mentor and teacher of junior teammates. I mentored a developer apprentice in her first engineering job, providing guidance — both technical and pastoral — along the path to becoming a productive and skilled developer.

- I've conducted hundreds of interviews for a variety of roles across the Product & Engineering department. Working with management and HR, I devised and documented several interview questions which remain in use as standard by other interviewers in the department.

Huddle

Software Developer	*2014–2015*
Graduate Software Developer	*2013–2014*

Huddle is a secure collaboration and filesharing system for enterprise and government.

- With two teammates, I delivered a strategic technical project, extracting Huddle's key file-sharing component from the surrounding legacy application into a micro-service. This allowed us to deliver over the next two months a 10-fold performance gain for the product's main pages.

- During 20% time, I designed and implemented several innovative features for Huddle, including a project entitled Annotations which won the prize for best Hackathon pitch.

- I contributed a net negative number of lines to Huddle's codebase.

University of Oxford Physics Department

Research Software Developer *Summer 2012*

National Physical Laboratory

Research Assistant *2009–2012*

EXTRA-CURRICULAR

I'm the author of several high-quality open source libraries, available on my GitHub profile (https://github.com/benjamin-hodgson):

- **Pidgin**, a functional parsing library with a focus on performance.

- **Sawmill**, a library of abstract tools for working with trees.

- **Eighty**, an HTML generation library.

I've also contributed to third-party open source projects, including performance and documentation fixes in the .NET Framework.

My personal website, https://www.benjamin.pizza, features posts about technical matters. Highlights include:

- *Write You A Prolog*, a programming language implementation tutorial.

- *Recursion Without Recursion*, detailing Sawmill's API and design.

- *Rewriting IRewritable*, detailing Sawmill's internal implementation.

I'm a high-reputation Stack Overflow user with over 400 posts, mainly in the Haskell tag.

I love to learn programming languages, especially those which make you think differently about software. I've written personal projects using Haskell, Rust, Scala, Prolog, Agda, Coq, and Idris.

EDUCATION

St. Catherine's College, University of Oxford
2009–2013

- MPhys Physics. Upper Second class honours.

- I received the Neville Robinson Prize for performance in final examinations.

Tiffin Boys' School, Kingston Upon Thames
2002–2009

- A levels: Physics A, Maths A, Music A.

References available upon request.