

Engineering & Games

Solve intelligence. Use it to make the world a better place.

DeepMind is the world leader in artificial intelligence research and its application for positive impact. We're on a scientific mission to push the boundaries of Al, developing programs that can learn to solve any complex problem without needing to be taught how. If we're successful, we believe this will be one of the most important and widely beneficial scientific advances ever made, increasing our capacity to understand the mysteries of the universe and to tackle some of our most pressing real-world challenges.

Software **Engineering**

Software Engineers work with all of our teams across scientific, technical and creative fields to deliver high-impact projects with interesting and unique engineering challenges. The overarching goal of our software engineering teams is to develop cutting-edge technologies and high performance computing platforms that accelerate our research over the long term.



Adrian Bolton

"Continued progress in AI requires next generation environments – rich interactive virtual worlds within which our agents can explore, and learn to carry out a wide variety of tasks. Enter DeepMind's Worlds team. We collaborate deeply with our researchers to design and build a wide variety of environments and tasks, whilst creating new platforms and tools to empower researchers to build environments themselves.



DISTINGUISHED ENGINEER

Dan Belov

"Software engineers play a crucial role in any sustainable scientific effort; DeepMind's long-term goal to solve AGI is

Research Platform team (RPT)

The Research Platform team's (RPT) mission is faster, more robust research; comprising a core group of Software Engineers within DeepMind Research who work to provide a best-in-class research workflow. The team build tools, infrastructure, libraries, frameworks, services and products to enable and accelerate the next generation of research ideas. Leveragi<mark>n</mark>g DeepMind's massive computational resource pool to maximum effectiveness (TPUs, GPUs, and CPUs). RPT plays a critical role in the mission of DeepMind in multiple ways. In the simplest form, improving workflows have a direct impact on research productivity, by freeing up more time but equally provides the extra cognitive space that allows new research ideas to flourish.

Worlds team

Gaming has been in the DNA of DeepMind from its inception. From bespoke mini-games aimed at answering specific research questions, to expansive first-person games using modern 3D engines, the Worlds team plays a fundamental part in every research area at DeepMind. Based on well-known game engines such as Unity and Unreal, the environments that the team create play a fundamental role in major research breakthroughs. Worlds is a team of games developers, designers, artists and QA technicians working closely with researchers to devise bespoke environments that will test specific cognitive functions of an agent. The team hails from a range of backgrounds including engineering, games and VFX companies.

Meet other members of the team



SOFTWARE ENGINEER(RPT) **Tamara**

"I studied undergraduate computer science and completed my dissertation project around implementing a parallel Prolog interpreter. As a software engineer in the research platform team, my goal is to enable varying and fast-paced research. I'm currently working on creating efficient and flexible higher-level abstractions for the representation and creation of neural networks. DeepMind is an inclusive environment where everyone feels like their opinion and contribution is valued."

Software Engineering in Research team

Software Engineers in Research (SWE-R) work directly on rapidly developing research prototypes, creating common tools that enable the wider research team to perform rigorous experimentation at scale. This work may include creating complex Reinforcement Learning agents, training pipelines, tools for visualisation and debugging, testing, and ensuring the reliable running of agents. The SWE-R role provides unique engineering challenges in combining state-of-the-art computer systems with novel Al algorithms, acting as a critical component in supporting complex experimentation for the whole research team.

LEVEL DESIGNER, WORLDS TEAM Cédric

"I spent over twelve years working in the games industry for a range of companies before joining DeepMind. As a games designer, my role is to conceive and implement tasks that can test the progress of researchers' agents. What I enjoy most about my role is watching agents creatively solve tasks, even those that I thought might be too difficult!



