Professor Day,

Look up for a moment. On the barrel roof above us, you can just make out allegorical figures representing theoretical and practical science, created in the 1880s — faint now, almost ghostly, revealed only through the interplay of texture and shadow. Then let your gaze return to this hall: the silver and ebony of the mace, the drapery of academic robes, the glint in people's eyes. Images that evoke heritage, solemnity, joy.

Now imagine, within the narrow confines of a two-dimensional screen, creating *virtual* worlds that capture those same subtleties — worlds that still summon up curiosity, surprise and achievement. Phil Scott has devoted his career to giving people the power to build those realistic but unreal worlds at the heart of video games, now a core part of our culture.

Phil grew up in Consett — once one of the world's great steel towns — in a loving family of exceptionally smart parents and grandparents. Creativity and expectation were part of daily life; he remembers being handed an electric plug and screwdriver as a very young child, simply to see what he would do with them, and watching his engineer grandfather working on complex gearboxes.

But in the 1980s the steel industry's days were numbered, and Phil witnessed its decline. He remembers watching with his schoolmates as the steelworks on which his town depended were demolished before their eyes. The future would demand new industries and new lands to explore.

Phil's first glimpse of those new lands came in the 1980s, when a friend acquired a Sinclair ZX-81, one of the earliest mass-market home computers. Learning it from the bottom up, programming in BASIC with 1k of memory and that unforgiving membrane keyboard, was a challenge, but it nevertheless created a generation of "Bedroom Coders". Phil was one of them. Encouraged by a brilliant physics teacher, the late Phil Lewis, and by a Saturday coding club at the Discovery Museum, he became part of a vibrant game-engineering culture in the North East. He remembers sending a program listing to a computer magazine and being paid for it — by cheque!

An able mathematician, musician and artist, Phil took his BTEC in Computing at New College Durham but didn't want to go straight to university. Instead, he joined Tynesoft in Blaydon, a company he describes as "a dream team of 19-year-olds who ended up creating world-leading hit games".

In the 1980s the games industry was unknown territory. Phil has often said he cannot thank his parents enough for supporting him in taking that risky step – with their love, courage, and confidence in him. So it is a privilege to welcome Phil's family today — especially his mother Vicky, his aunt Margaret and his wife Jane.

Games studios don't just craft striking visuals or compelling stories; they must also deliver each title across a wide range of devices. Early on, this meant rebuilding the same game for every platform. At Tynesoft, and later at Flair in Ponteland, Phil created one of the world's first graphical asset pipelines — a system that let teams generate and deploy content efficiently across platforms. That breakthrough helped shape the standard workflows behind modern engines like Unreal and Unity, familiar to today's graduates, lowering the cost of making games and opening the door for more artists to build worlds that could reach players widely and quickly.

You might imagine the early games industry as a noisy crowd of exuberant youngsters — and it often was — but Phil stood apart. His friend Hans Zetterstrom, who played with him in a hard-rock band, recalls that, amid the band's creative chaos, Phil already carried a quiet authority. No bravado, no theatrics, but the room stilled when he spoke because what he said mattered. And somehow, ever the engineer, he routinely managed to get the band's three amps, three guitars and a full drum kit into a 1986 D-reg Vauxhall Nova!

Phil's career accelerated when he joined Rage Games, where he was considered a bit of a coding genius thanks to his grasp of mathematics and physics. He was the technical lead behind *Expendible*, a landmark title recognised as one of the first to implement a suite of innovations that set new standards in real-time rendering.

Phil Wright, a colleague and friend at Rage, recalls travelling with Phil to meet games and electronics companies — including **Nvidia**, which was then a relatively small graphics-card pioneer known only among enthusiasts, but whose name is global today. He remembers an Nvidia engineer asking about a new technology they were developing and whether it would be useful for game studios. Phil (Scott) explained why it wouldn't be ideal, then outlined how he would tackle the issue. As it dawned on everyone that he really knew what he was talking about, notebooks came out, and people hung on his every word. Nvidia offered him a job on the spot. Today, both Phils hold key roles in that company.

Phil (Scott) joined Nvidia in 2000 and is now Director of Developer Relations for Europe, the Middle East and Africa, connecting technical capabilities with application and helping studios to reach ever-more ambitious goals. In the role, he has supported global entertainment franchises, including Star Wars, Harry Potter and many of the biggest video-game releases.

Phil's job is about people as much as tech. Leaders at one studio — Jon Seymour, Chief Operating Officer, and Arden Aspinall, Chief Executive Officer of Cast Iron Games in Wakefield — describe their relationship with Phil as "a lasting friendship". They say he shapes culture, encourages people to question assumptions, and acts as a "champion", introducing contacts while managing the complexities of working among competitors. They put it simply: "The industry is a better place for his influence."

Nvidia's Graphics Processing Units revolutionised video-game engineering, but now the same computational power underpins high-performance computing in artificial intelligence and many other fields. Nvidia's GPUs power Comet, our university's new high-performance computing facility, supporting engineering simulations, environmental modelling, genomics, epidemiology, digital archives and computational linguistics.

When our colleague Professor Graham Morgan sought to strengthen academic engagement with the games industry, he turned to Phil. The network of industry advisors they created has ensured that Newcastle's game-engineering graduates are equipped for an industry that demands the highest skills. For over 15 years, Phil has been a regular visitor to the University — lecturing, advising colleagues and helping aspiring developers. You'll often find him in the lab, offering suggestions, troubleshooting, encouraging students. With his support, over 500 graduates from Newcastle have gone directly into the sector, many through opportunities that his advocacy has enabled.

In honouring Phil today, we recognise someone whose contributions run throughout the evolution of real-time computer graphics, and whose influence will be increasingly acknowledged as the history of this still-young industry is written.

On the edge of the moors overlooking Consett, Tony Cragg's monumental sculpture *Terris Novalis* — "new-made lands" — depicts a theodolite and an engineer's level, instruments used in both the building and demolition of the Steelworks. From witnessing the loss of his hometown's industrial heart, to daring to enter an industry that barely existed, to building the deep expertise and authority that shaped it, and all the while keeping his rock-and-roll spirit, Phil Scott has created *Terris Novalis* — new-made land forged at the joining of art and mathematics, theoretical and practical science. This is the land that will now be explored by Comet, by our academic community, and — most importantly — by the graduates who have crossed this stage today.

Professor Day, in recognition of his global stature as a pioneer in new lands, his inspiration to the industry and his commitment to future generations, I present to you Philip Scott as a candidate for admission to the degree of Doctor of Engineering *honoris causa*.

Prof. J S Fitzgerald,
Senior Public Orator
7th July, 2026