UK ARTIFICIAL INTELLIGENCE INVESTMENT REACHES RECORD LEVELS AS UK AI SCALEUPS TACKLE FAKE NEWS AND CLIMATE CHANGE

- In the first six months of 2019, AI investment in the UK has reached an all-time high - making it a record year for AI funding growth (for figures see full release below)
- The UK is third in the world for raising investment in AI, and second in the world for the number of AI companies in operation during 2019
- The news comes as Tech Nation announces which 29 companies have successfully made it onto the UK's first ever Applied AI growth programme
- The cohort points to the state of innovation of AI in the UK, with firms pioneering AI solutions for cancer diagnosis, tackling climate change, and addressing fake news
- 45% of companies have at least one female co-founder; 35% of the cohort are based outside London, companies headquartered in: Bournemouth, Bristol, Cambridge, Cardiff, Exeter, Gateshead, Glasgow, Manchester and Oxford
- Supporters of the programme include Professor Dame Wendy Hall, Sarah Wood, Unruly; Dave Palmer, Darktrace, Husayn Kassai, Onfido, and Tabitha Goldstaub
  The total funding raised by the cohort is £57.8 million where backers include top investors like LocalGlobe, Entrepreneur First, IQ Capital, Pentech, and SpeedInvest.

Today, Tech Nation, the UK's leading network for ambitious tech entrepreneurs, has announced the 29 companies joining the UK's first Applied AI growth programme, as it is also reveals that UK AI investment is reaching record highs. The inaugural sector programme aims to support the AI founders that are making a positive and tangible impact on today's society at a crucial stage of their growth journey.

The cohort were chosen on their ability to provide AI-driven solutions to real world problems, applying artificial intelligence to create a tangible impact on society. The cohort includes Glasgow-based ClinSpec DX, which uses AI to provide cost-effective blood tests for the early detection of brain tumours. London-based Cervest utilises machine learning to answer questions linked to climate uncertainty, land, and natural resources. Bristol-based Gapsquare apply Artificial Intelligence to tackle gender and minority pay inequality.

Investment in AI technology grew almost six-fold from 2014 to 2018, with UK AI scaleups raising almost double that of France, Germany and the rest of Europe combined last year. 2019 is set to be another year of record funding growth in AI in the UK, building on four years of consecutive growth. In the first 6 months of this year, AI funding in the UK has already surpassed 2018's figures (AI investment reached $1,021,642,595 in 2018 in the UK, but has already reached $1,063,012,777 in the first 6 months of 2019, source: Crunchbase).

As a result, the UK is currently third in the world for raising investment in AI, behind only China and the U.S. respectively (see Figure 1.0 with data from Crunchbase), and second in the world (behind the U.S.) for the number of AI companies in operation during 2019 (Source: Crunchbase).

Figure 1.0
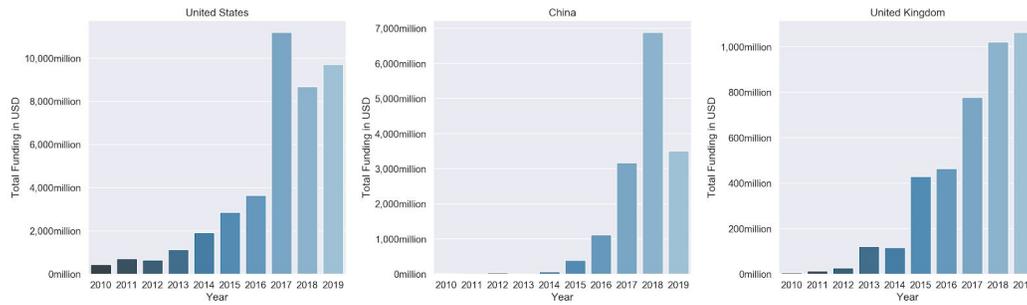
Source: Crunchbase, collected 16th-17th August 2019

The growth of AI is well documented, but a comparison of China and the UK's AI ecosystem offers an interesting perspective. In the UK, 89% of the AI ecosystem is predominantly made up of startup companies with 50 or fewer employees. In comparison, Chinese AI companies tend to have larger workforces; 53% have more than 50 employees. The data speaks to a bigger issue: scaling an AI company still presents a number of unique challenges. From fundraising a 'deep tech' company, to hiring in-demand AI talent.

Tech Nation's Applied AI programme aims to support companies as they move from the early stages of growth, subsequently fulfilling a critical demand facing the AI tech sector. The programme is also part of the Government's AI Sector Deal's ambition to make the UK the best place to start, grow, and scale an AI business.

The Applied AI programme is structured around sessions that focus on key scaling challenges which will be delivered by entrepreneurs, including Sarah Wood, Founder, Unruly; Dave Palmer, Co-founder, Darktrace; Husayn Kassai, CEO, Onfido; Mark Logan, former-COO, Skyscanner; Angie Ma, COO, Faculty; and Miguel Martinez, Co-founder, Signal AI.

The companies will have access to support from the programme partners; CBRE, RSM and Talent Works International, whose expertise and networks are an added benefit of being on the programme.

Quotes

Minister for Digital Matt Warman MP commented: "Britain has a long history as a global leader in computing technologies and it is home to the early pioneers of AI – Ada Lovelace and Alan Turing. It is great to see our legacy in this field continue by the next generation of British AI startups who are using the power of technology to solve real-world problems such as tackling fake news, detecting cancer earlier and efficiently managing waste.Tech Nation's Applied AI programme will help us make the UK the best place to start and grow an AI business and generate a significant contribution to the future economy. I look forward to seeing these companies compete on the global stage."

Gerard Grech, Tech Nation, CEO commented: "With investment in UK-based artificial intelligence tech companies ranked third in the world, after the US and China, Tech Nation is delighted to announce such a strong first cohort of Applied Artificial intelligence companies, including companies such as ClinSpec DX in Glasgow which uses intelligence to analyse blood for early detection of cancers to Bristol-based, Gapsquare, which enables companies to track employee pay disparity to build fairer workplaces. With 35% of the AI companies based outside London and 45% having at least one female co-founder, the UK could not be building a stronger and more diverse network of Artificial Intelligence excellence at this important time of technology development, globally."

Joanna Shields, CEO BenevolentAI commented: "The creativity and quality of the companies featured in Tech Nation's first Applied AI cohort demonstrates why the UK has earned its place as a global centre of tech excellence - where AI can act as a force for economic transformation and as a means to tackle some of society's most challenging issues."

Dr Sarah Wood, Founder, Unruly commented: "The companies chosen to join Tech Nation's Applied AI programme are tackling some of the most pressing issues of our time, from fake news to climate change. With the UK now third in the world for AI investment, I look forward to supporting the programme and seeing the significant impact these companies will have."

Harry Davies, Tech Nation, Applied AI Lead: "For the UK to maintain its authority in AI, we need to nurture scalable, globally-competitive, homegrown AI companies that solve real problems. Yet, the pool of AI-focused companies that achieve this beyond Series A remains slim, despite the hype, and the path to scale is uniquely challenging. That is why it is so important that we champion our most promising UK AI companies with the greatest potential for growth as they look to scale and that's what this group represents: 29 of the UK's most exciting AI-focused startups on the path to building impactful and scalable companies, all chosen by a panel of expert judges."

Tabitha Golstaub, Chair, AI Council and Founder, CognitionX commented: "I'm thrilled to see the launch of Tech Nation's first Applied AI cohort. It's great to see the strength of technical expertise and diversity of the companies. With 35% operating outside of London and nearly half of the cohort's participants having at least one female founder I think this represents the AI community well and exactly what we should be championing."

Angie Ma, COO & Co-Founder, Faculty commented: "I had a fantastic time being part of the judging panel for the new cohort. I found it fascinating to see the many different ways in which artificial intelligence is being applied to solve business and societal challenges – it shows the real value AI can have to the UK economy as a general purpose technology. The judges were all in agreement on the companies we think stand to gain the most out of the programme. At Faculty, we're excited to be involved, to see the cohort at workshops and events and help these AI startups to succeed."

Dr Mike Short CBE, Chief Scientific Advisor, Department of International Trade commented: "It was great to judge so many strong AI ideas that were tested and appeared ready to scale up. I look forward to following the progress of these young companies with their hunger for success and imagination, particularly as they look towards international investment and exports."

Marta Krupinska, Head of Google for Startups UK commented: "I couldn't have hoped for a better judging experience - it's fantastic how the Tech Nation team managed to bring together some of the most brilliant minds in tech and AI for a lively discussion on who'll be the next game changing start-up. AI is all the rage now and a fantastic tool to support solutions for the world's most pressing problems, and I look forward to seeing the selected startups benefit fully from this program."

Volker Hirsch, Partner, Amadeus Capital commented: "It was a pleasure to help choosing the cohort of Tech Nation's Applied AI programme. I was impressed with the quality and depth of the companies applying, which is testament to the UK's strength in this pivotal technology sector, which we at Amadeus Capital are keen and proud to support. I am very much looking forward to meeting the cohort and help them thrive."

Cohort Quotes:

Ant Kennedy, CTO, Gapsquare, Bristol commented, "We help companies to use data to deconstruct and end bias and inequality and now is the time for AI to take that step towards generating more inclusive workplaces. We're proud to be pairing with Tech Nation and believe being part of their Applied AI programme will enable us to further develop our software to both identify and predict pay inequality within the workplace. We look forward to seeing the change this will make for global employers and the people who work for them."

Elizabeth Clark, CEO, Dream Agility, Manchester commented: "We're delighted to have made it onto the Applied AI scheme. It's the first of its kind and to have a peer group of people with their own proprietary AI in such a fast moving sector is phenomenal. There's a lot to be gained by learning from each other's successes and failures, as well as being able to leverage each other's networks. It's a race to scale and having a scheme that will support us in doing that is a gift!"

David Levine, CEO, DigitalBridge, Manchester commented: "We're really excited that a panel of internationally-renowned industry experts in AI and Scaleups have selected DigitalBridge for Tech Nation's new Applied-AI Growth Programme. It's a validation of what we've been doing for some time in using AI to disrupt the world of bathroom and kitchen design and remove friction we know prevents purchases - allowing consumers to design and buy their dream room easier and quicker. The programme will allow us to learn from the best in the business, and scale DigitalBridge from a Manchester startup into an international AI business."

Dr Matthew J. Baker, Chief Scientific Officer, ClinSpec Dx, Glasgow commented: "ClinSpec Dx are excited to be part of the first growth programme supporting founders of impactful AI focused companies to tackle real world problems such as our worlds first cost-effective blood test for the triage of brain tumours. Glasgow is a real hub for innovation and entrepreneurship with ClinSpec Dx based in the Technology and Innovation Centre, part of the Glasgow City Innovation District at the University of Strathclyde. Data will drive Scotland's next economic revolution. We are keen to immerse ourselves in the Tech Nation programme to harness our data for the benefit of patients not only in Scotland but globally.

Megan Laubershimer, Head of Business Development at Genie AI, London commented: "We at Genie AI are excited to be joining Tech Nation's Applied AI because we believe the key to success is hard work, perseverance and collaboration. The best advice and support comes from those who've done it before, and we're keen on both learning and sharing insight with like-minded peers."

Steve Erdal, Founder & CEO, WordNerds, Gateshead commented: "Tech Nation is a very special organisation, and one that we at Wordnerds have admired for a long time. Not only do they give small tech companies from all over the country a national and global platform, but their commitment to knowledge sharing allow the whole sector to move forward. We didn't hesitate to apply when we saw the Applied AI Growth Programme. We don't want to be a scaleup forever. This opportunity to gain in-depth understanding from people who have walked this path, and to interact with our peers at the cutting edge of AI tech, is an incredible opportunity, that would have been impossible for us without Tech Nation. We are beside ourselves with excitement."

Mikela Druckman, Co-Founder & CEO of Greyparrot, London commented: "We believe Tech Nation will assist us in our ultimate goal of using AI to create positive social impact by solving key issues in waste management. We are excited to be part of this prestigious programme which is backed by some of the brightest minds in AI. We look forward to significantly expanding our network and gaining valuable insights from experts in scaling AI."

Iggy Bassi, Founder & CEO, Cervest, London commented: "The expertise of the people involved with the initiative is extremely impressive and the chance to count ourselves part of a network that includes alumni such as Darktrace, Shazam and Peak is hugely exciting for us. At a pivotal time for our business, we are looking forward to benefiting from a valuable external perspective and expert counsel, as well as the opportunity to amplify our reach to prospective partners and markets as we continue to grow our business."

Dhruv Gulati, Co-Founder & CEO, Factmata, London commented: "I believe that Tech Nation's Applied AI programme will help Factmata productise and get its groundbreaking natural language processing technology to market in the UK, helping us help businesses and internet users understand what is being said in online content, at mass scale.

Camille Rougie, Co-Founder & CEO, Plural AI, London commented: "Excited to join such a brilliant network of founders - entrepreneurship is quite the lonely pursuit, and I've found the biggest help has always come from other founders sharing tips and war stories!"

Hami Bahraynian, Co-Founder & CEO, Wluper, London commented: "For us, getting investments doesn't necessarily mean only by way of receiving cash, but also expertise, support and insights from the experienced people involved at Tech Nation, which can certainly help us to push forward."

Ends

Notes to Editor

AI cohort in numbers
- 45% of cohort companies have at least one female co-founder
- 24% of cohort companies are led by a female CEO
- 35% are based outside of London, in: Bournemouth, Bristol, Cambridge, Cardiff, Exeter, Gateshead, Glasgow, Manchester & Oxford;
- Average number employed: 12 people; largest company: Digital Bridge, 35 employees;
- Average incorporation date: 2016 (3 years)
- Average raised £1.9 million
- Total funding raised by cohort is £57.8 million - backers include top investors like LocalGlobe, Entrepreneur First, IQ Capital, Pentech, and SpeedInvest.
- Average revenue of £183,000
- 90% B2B, 10% B2B2C
- The average team size is 12, with the largest being 35 employees.
- Top 4 scaling challenges: Hiring talent, sales in very regulated industries, raising Series-A investment a Deep Tech company; technical teams that need support on commercial
- The cohort aims to increase from 345 employees to 783 in a year's time. That represents an annual growth rate of employees of 127%.

Programme judges
Professor Dame Wendy Hall
David Kelnar, Partner, MMC Ventures
Nathan Benaich, Founder, Air Street Capital
Dr Mike Short CBE, Chief Scientific Advisor, DIT
Louise Marston, Managing Director, Doteveryone
Volker Hirsch, Partner, Amadeus Capital
Lopa Patel MBE, Chair, Diversity UK

Gillian Docherty, CEO, The Data Lab
Jem Davies, GM Machine Learning, ARM
Pratima Aiyagari, AI/ML and Deep Tech Lead EMEA, Cisco Investments
Mike Dimelow, Chief Investment Officer, ADV
Angie Ma, COO, Faculty
Richard Potter, Peak AI
Sylvain Hanssen, Walgreens Boots Alliance
Marta Krupinska, Head of Google for Entrepreneurs

AI Insight Peers
Sarah Wood, Founder, Unruly
Akriti Dokania, Octopus Ventures
Christopher McCann, Current Health
David Palmer, Co-Founder, Darktrace
Angie Ma, Co-Founder, Faculty
Mathieu Ayel, Head of Product, Tractable
John Spindler, CEO, Capital Enterprise
Mark Logan, COO, Skyscanner
Max Bautin, Partner, IQ Capital
Miguel Martinez, Co-Founder, Signal AI
Ofri Ben Porat, CEO, Edgify
Simone Maini, COO, Elliptic
Husayn Kassai, CEO, Onfido
Roger Taylor, Chair of the Centre for Data Ethics and Innovation
Dave Bailey, CEO Coach
Nadav Tal-Israel, CTO, Edgify
Martin Brown, Geospock
Alex Jevons, CMO, Hummingbird AI
David Keene, CMO, Funding Options
Melissa Ayres, VP Global Marketing, OpenSignal

AI programme 1.0 cohort

Antiverse - Cardiff - http://www.antiverse.io
Antibodies are a very successful and valuable class of drug. But discovering and developing them into new drugs is a laborious and unreliable lab-based process. Antiverse's in silico models discover and optimise new antibody candidates faster, meaning only better targeted and further optimised candidates are included in expensive clinical trials. With the top-selling antibody bringing in sales of $19.9bn in 2018, the potential is huge.

Astroscreen - London - https://www.astroscreen.com - @AstroscreenHQ
Astroscreen uses AI to protect brands and defend democracy from harmful social media manipulation campaigns, also known as astroturfing. Social networks have become the new cybersecurity attack vector and Astroscreen is building the solution.

Bibblio - London - https://www.bibblio.org - @Bibblio
Bibblio helps content owners navigate the attention economy by matching the right content to their audience through AI, thereby increasing engagement and maximising the return from content. Bibblio's AI engine runs across three tools: Circulation, Syndication and Promotion. Each targets important metrics for content owner teams.

BIOS - Cambridge - https://www.bios.health/ - @BIOShealth
BIOS is a leading neural engineering startup, creating the open standard hardware and software interface between the human nervous system and AI. Improving the quality of life for millions of people affected by chronic disease, they combine applied materials, machine learning, software, neuroscience with the experience of surgeons, clinicians and patients.

C The Signs - London - https://cthesigns.co.uk - @CtheSignsTool
C the Signs is a digital tool that uses AI mapped with the latest evidence to accurately identify patients at risk of or in the early stages of cancer. The early stages of cancer is the most curable stage of the disease and their technology is currently being used in the NHS.

Calipsa - London - https://www.calipsa.io - @Calipsa_io
Calipsa is on a mission to make the world a safer place. By building technology that transforms the detection and prevention of crime, Calipsa is empowering security professionals worldwide to make better decisions, in real-time. It uses cloud-based AI technology to identify the cause of a CCTV alarm, filtering out over 85% of false alarms and forwarding only true alarms to human operators to review.

CausaLens - London - https://www.causalens.com - @CausaLens
causaLens is building the next generation of autonomous predictive technology for complex, dynamic systems and presence in key global markets. With a team that consists of scientists and engineers at the top of their game, their technology processes data to understand how the global economy will develop.

Cervest - London - https://cervest.earth - @CervestEarth
Cervest helps businesses, governments and growers adapt to climate volatility. They use machine learning to generate real-time streamed 'climate signals' to answer questions linked to climate uncertainty, land, and natural resources. It informs decisions that help mitigate risk, safeguard food and economic security – and protect our planet.

Chosen AI - London - https://chosen.ai
Chosen AI is a people analytics platform that uses advanced Natural Language Processing and Deep Learning to help employers identify and optimise the potential of their existing employees. They have built a global contextual skills knowledge base that connects with existing HR systems to generate predictive insights that help align people strategies to business strategies.

ClinSpec Dx- Glasgow - https://www.clinspecdx.com - @clinspecdx
ClinSpec Dx uses artificial intelligence to analyse blood for early detection of cancers and other diseases and have developed the world's first cost effective blood test for the early detection of brain tumours. Studies have shown that their technology can bring savings to healthcare service providers as well as improved quality of life for patients.

Codec - London - https://www.codec.ai/ - @codec_ai
Codec has built a platform that helps brands identify the audience networks that matter most to them, with rich insights into how they can win their engagement and grow. This is performed by real-time analysis of hundreds of millions of real content interactions.

DigitalBridge - Manchester - https://www.digitalbridge.com - @DigitalBridgeHQ
DigitalBridge is a Guided Design platform that enables retailers to help their customers design and buy their dream bathroom or kitchen. Integrating directly into a retailer's website, DigitalBridge guides their customers through the entire process, from concept to design to visualisation and completion. By

reducing friction and difficult decisions, they enable retailers to shorten sales-cycles and increase conversion and revenue.

Dream Agility - Manchester - https://dreamagility.com - [@DreamAgility](https://dreamagility.com)
Dream Agility uses Machine Learning and Visual AI to manage every aspect of Google Ads. From using Visual AI to attribute rich data from images, to MLoD (machine learning on demand) to disrupt the agency relationship, pass on massive savings and increase uplifts.

Factmata - London - https://factmata.com - [@factmata](https://factmata.com)
Factmata builds natural language processing to understand online content for what is being said, and how. Their goal is to develop a better understanding of online information, and rebuild trust in the internet.

Flexciton - London - https://www.flexciton.com - [@flexciton_ai](https://www.flexciton.com)
Flexciton uses AI to optimise production scheduling for manufacturers. A factory production schedule dictates what should be manufactured, how and when. Creating a production schedule for just one week typically presents more than a trillion different options. Flexciton software searches through all of those options to generate the best schedule possible.

Gapsquare - Bristol - https://www.gapsquare.com - [@gapsquare](https://www.gapsquare.com)
Gapsquare enables companies worldwide to track pay disparity, pay equality and pay gap data instantly and sustainably, building fairer workplaces and simpler processes around fair pay. Gapsquare offers AI insights around building an inclusive workplace, moving pay gap and equality analytics in-house and within the control of the company.

Genie AI - London - https://genieai.co/home - [@Genie_AI](https://genieai.co/home)
Genie AI uses machine learning to curate and share relevant legal knowledge within a firm or legal team, empowering lawyers to draft with the collective intelligence of the firm. Their intelligent contract editor, "SuperDrafter," analyses thousands of variations of the same clause, deducing market standards so clients can negotiate the best deal every time.

Greyparrot - London - https://greyparrot.ai - [@greyparrotai](https://greyparrot.ai)
Greyparrot is improving and automating the recycling process by enabling waste composition analysis and sorting of waste types. They use deep learning to power next-generation robotics and smart systems for waste management.

Humanising Autonomy - London - https://www.humanisingautonomy.com - [@HumanisingAuto](https://www.humanisingautonomy.com)
Humanising Autonomy is setting the global standard for how Automated Vehicles interact with people. The company has developed an intent prediction technology that predicts the full range of pedestrians and vulnerable road use behaviour across different environments and cities. As a critical perception technology, the software integrates with driver assistance systems, autonomous vehicle stacks, and smart infrastructure systems for real-time accident and near miss prevention, improving the safety and efficiency of Urban Mobility Systems across cities worldwide.

Latent Logic - Oxford - https://www.latentlogic.com/ - [@Latent_Logic](https://www.latentlogic.com/)
Latent Logic ensures that autonomous vehicles can coexist and interact safely with humans in the real world, at scale. A spin-out of the award-winning Computer Sciences department at Oxford University, they use machine learning to build realistic simulations of motorists, cyclists and pedestrians - critical for the development, testing and certification of autonomous vehicles.

Monolith AI - London - https://www.monolithai.com - [@Monolith_AI](https://www.monolithai.com)

Monolith AI is a team of engineers, data scientists and software developers that work together to accelerate engineering through the use of AI. They have developed a software that combines AI, tailored visualisation tools and high-performance computing to enhance the productivity and knowledge of engineers, predict results ahead of time, and accelerate product development.

People Matter Tech - Bournemouth - https://peoplematter.tech - @PeopleMatterLtd
People Matter Tech's mental wellness platform is a safe online space that measures and improves mental wellness at work, without surveys. Their AI learns who you are and how your digital environment impacts your burnout risk, offering personalised recommendations.

Plural AI - London - https://plural.ai - @pluralAI
Plural AI is building a computational engine or data science platform for finance. Their systems mine web data to help business users answer complex, business relevant questions. They are working towards becoming the default interface for knowledge work, allowing business users to access complex data science without knowing how to code.

Predina - Exeter - https://www.predina.com - @PredinaLtd
Predina is the new upcoming leader in automotive spatio-temporal risk. It uses AI to build a dynamic risk map platform (STARI) that predicts and prevents the risk of road crashes based on contextual (spatio-temporal data) and historical accidents. STARI makes road users aware of contextual risk and provides the safest route from A to B in real time. They license their core technology to automotive mapping partners for ADAS and AV use cases and insurance telematics.

SenSat - London - https://www.sensat.co.uk/ - @SenSat_AI
SenSat builds digital simulations of the real world to help computers solve complex problems. Their simulated reality platform Mapp® allows companies operating in physical domains, such as infrastructure construction, to make more informed decisions based on real site data.

Synthesized - London - https://synthesized.io/ - @Synthesizedio
Synthesized accelerates data-driven projects with high-quality synthetic datasets that mimics original data, thereby unlocking deep insights whilst keeping original data locked down. Synthesized datasets allow partners to carry out practical analytics and research faster and more efficiently without ever needing to deal with sensitive data.

ThinkSono - London - https://thinksono.com
ThinkSono is an ultrasound AI company. AutoDVT is the world's first software that enables nursing staff to detect 'deep vein thrombosis' (DVT). DVT is a blood clot in the leg and is considered the number one cause of preventable hospital death.

Wluper - London - https://wluper.com - @wluper_
Wluper is building Conversational AI at the intersection of Natural Language Processing, Dialogue, and Knowledge Bases, aiming to bring them together by leveraging deep learning. Existing voice-based assistants can only understand one-way commands, not conversations, so developing goal-driven dialogue systems is required to achieve significantly improved user experiences.

Wordnerds - Gateshead - https://www.wordnerds.ai - @word_nerdy
Wordnerds teach computers to understand language, make decisions and find actionable insights. Using AI and advanced linguistics, they are turning the internet into the world's biggest focus group.