www.XiYuSoft.com　　　　　　　　　　　　　　　　　　　**锡育软件**

I'm going to talk about how AI and mankind can **coexist**, but first, we have to **rethink** about our human values.	我将会谈谈人工智能和人类如何能够共存, 但首先, 我们需要重新思考人文价值。[00:12]
So let me first make a **confession** about my errors in my values.	所以首先让我承认我价值观中的错误。[00:20]
It was 11 o'clock, December 16, 1991.	那时是1991年12月16日的11时。[00:25]
I was about to become a father for the first time.	我即将首次成为父亲。[00:30]
My wife, Shen-Ling, **lay in** the hospital bed going through a very difficult 12-hour labor.	我的妻子,申玲,躺在病床上 经历着一段艰辛并为时12小时的分娩。[00:33]
I sat by her **bedside** but looked **anxiously** at my watch, and I knew something that she didn't.	我坐在床边 但却焦虑地望着我的手表, 而我知道一些她不知道的事。[00:40]
I knew that if in one hour, our child didn't come, I was going to leave her there and go back to work and make a presentation about AI to my boss, Apple's CEO.	我知道如果在一小时内, 我们的孩子还未出生, 我将要将她留在那里 并去上班 并向我的老板,苹果的首席执行官 呈现个有关人工智能的陈述。[00:47]
Fortunately, my daughter was born at 11:30 --	幸运的是,我的女儿在11:30出生了--[01:02]
(Laughter)	（笑声）[01:06]
(Applause) **sparing** me from doing the **unthinkable**, and **to this day**, I am so sorry for letting my work **ethic** take **precedence** over love for my family.	（掌声）为我免去了要做难以想象的事的需要, 而一直到今天,我为我优先工作伦理 于对我家人的爱之上感到抱歉。[01:08]

(Applause) My AI talk, however, went off **brilliantly**.	（掌声）然而,我人工智能的呈现, 进行得非常好。[01:22]
(Laughter) Apple loved my work and decided to announce it at TED1992, 26 years ago on this very stage.	（笑声）苹果喜欢我的作品 26年前就在这个台上。[01:30]
I thought I had made one of the biggest, most important discoveries in AI, and so did the "Wall Street Journal" on the following day.	我以为我做了在人工智能领域内 其中一个最重大的发现, 第二天 "华尔街日报" 也是这么认为。[01:42]
But as far as discoveries went, it turned out, I didn't discover India, or America.	但随着越来越多的发现, 结果是, 我并没有发现印度或是美洲。[01:51]
Perhaps I discovered a little island off of Portugal.	或许我发现的是葡萄牙附近的一个小岛。[01:57]
But the AI era of discovery continued, and more scientists **poured** their souls into it.	但是人工智能的发现时代持续了下去, 而越来越多的科学家全心全意地投入其中。[02:02]
About 10 years ago, the grand AI discovery was made by three North American scientists, and it's known as deep learning.	大约10年前,三名北美科学家 做出了重大的人工智能发现, 那就是深度学习。[02:09]
Deep learning is a technology that can take a huge amount of data within one single domain and learn to predict or decide at **superhuman** accuracy.	深度学习是个能在单一域名中取得大量资料 并用超人的精确度[02:17]
For example, if we show the deep learning network a massive number of food photos, it can recognize food such as hot dog or no hot dog.	例如,如果我们向深度学习网络显示 非常大量的食物照片, 它可以辨认出 例如有热狗或没有热狗的食物。[02:27]

(Applause) Or if we show it many pictures and videos and **sensor** data from driving on the highway, it can actually drive a car **as well as** a human being on the highway.	（掌声）或如果我们向它显示许多 在高速公路上行驶的影片和传感器数据, 它其实可以与人类媲美 在高速公路上开车。[02:38]
And what if we showed this deep learning network all the	若我们向这深度学习网络显示 所有特朗普总统所

English	Chinese
speeches made by President **Trump**?	发表过的演说呢? [02:54]
Then this **artificially** intelligent President Trump, actually the network --	这人工智能的特朗普总统, 其实是该网络--[03:01]
(Laughter) can --	(笑声) 可以--[03:07]
(Applause) You like double oxymorons, huh?	(掌声) 你喜欢双重矛盾修辞法,对吧? [03:10]
(Laughter)	(笑声) [03:17]
(Applause) So this network, if given the request to make a speech about AI, he, or it, might say --	(掌声) 所以此网络,若被要求发表一场 关于人工智能的演说的话, 他,或它,或许会说--[03:20]
(Recording) Donald Trump: It's a great thing to build a better world with artificial intelligence.	能运用人工智能来建立 一个更完美的世界是个很美好的事情。[03:36]
Kai-Fu Lee: And maybe in another language?	或许用另一个语言来说? [03:41]
DT: (Speaking Chinese)	人工智能正在改变世界[03:43]
(Laughter) KFL: You didn't know he knew Chinese, did you?	(笑声) 你们并不知道他会说中文吧? [03:45]
So deep learning has become the core in the era of AI discovery, and that's led by the US.	所以深度学习成为了人工智能发现时代的核心, 并由美国领导着。[03:49]

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sensor: n.传感器 **as well as:** 也;和...一样;不但...而且 **Trump:** n.王牌;法宝;喇叭/vt.胜过;打出王牌赢/vi.出王牌;吹喇叭 **artificially:** adv.人工地;人为地;不自然地

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English	Chinese
But we're now in the era of **implementation**, where what really matters is execution, product quality, speed and data.	但我们现在身处于实践时代, 被看重的是实行、产品质量、速度和数据。[03:56]
And that's where China comes in.	这就是中国被牵涉其中的时候了。[04:05]
Chinese **entrepreneurs**, who I fund as a **venture capitalist**, are incredible workers, amazing work ethic.	中国企业家, 我为这些斗胆的资本家提供资金, 他们是非凡的员工, 有非常棒的工作伦理。[04:07]
My example in the delivery room is nothing compared to how hard people work in China.	我在产房的例子与中国人工作用功的程度 相比之下不算什么。[04:15]
As an example, one startup tried to claim work-life balance: "Come work for us because we are 996."	例如,有个新公司声称工作与生活的平衡: "加入我们吧,因我们是996。" [04:20]
And what does that mean?	那是什么意思呢? [04:27]
It means the work hours of 9am to 9pm, six days a week.	那表示的是上午9时至晚上9时、 每周六天的工作时间。[04:29]
That's **contrasted** with other **startups** that do 997.	这与其他实施997的新公司形成对比。[04:34]
And the Chinese product quality has **consistently** gone up in the past decade, and that's because of a **fiercely competitive** environment.	而在过去的十年中, 中国制的产品质量在持续地提升, 这归功于具有极其竞争力的环境。[04:39]

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implementation: n.[计]实现;履行;安装启用 **entrepreneurs:** n.企业家(entrepreneur的复数) **venture:** vt.敢于/vi.冒险;投机/n.企业;风险;冒险 **capitalist:** n.资本家;资本主义者/adj.资本主义的;资本家的 **contrasted:** 比较/对比 **startups:** n.创业(startup的复数);开办 **consistently:** adv.一贯地;一致地;坚实地 **fiercely:** adv.猛烈地;厉害地 **competitive:** adj.竞争的;比赛的;求胜心切的

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English	Chinese
In Silicon Valley, entrepreneurs compete in a very **gentlemanly** fashion, sort of like in old wars in which each side took turns to fire at each other.	在硅谷,企业家用非常绅士的方式来竞争, 有点像是旧时的战争 双方轮流向对方发火。[04:48]
(Laughter) But in the Chinese environment, it's truly a **gladiatorial** fight to the death.	(笑声) 但在中国的环境内, 它就像是角斗士般往死里斗。[04:59]
In such a **brutal** environment, entrepreneurs learn to grow very rapidly, they learn to make their products better at **lightning** speed, and they learn to **hone** their business models until they're **impregnable**.	在这个极其残酷的环境内, 企业家学习如何迅速成长, 他们学习如何光速地将产品变得更好, 他们而学习将他们的企业模型 修饰至坚不可摧。[05:06]
As a result, great Chinese products like **WeChat** and **Weibo** are **arguably** better than the **equivalent** American products from Facebook and Twitter.	结果是,像是微信和微博的杰出中国产品 可说是比像是面子书和推特的相等美国产品更好。[05:21]
And the Chinese market **embraces** this change and **accelerated** change and **paradigm** shifts.	而中国市场欣然接受这项变化和 加速变化以及范式转变。[05:31]

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gentlemanly: adj.绅士的,绅士派头的 **gladiatorial:** adj.争论的;斗剑者的 **brutal:** adj.残忍的;野蛮的,不讲理的 **lightning:** adj.闪电的;快速的/n.闪电/vi.闪电 **hone:** n.磨刀石;想念;抱怨/vt.用磨刀石磨 **impregnable:** adj.无法攻取的;不受影响的;要塞坚固的;可以受孕的 **As a result:** 结果 **WeChat:** 微信(腾讯出品的一款语音聊天应用) **Weibo:** n.微博 **arguably:** adv.可论证地;可争辩地;正如可提出证据加以证明的那样地/[广义用法]可能,大概 **equivalent:** adj.等价的,相等的;同意义的/n.等价物,相等物 **embraces:** vt.拥抱;信奉,皈依;包含/vi.拥抱/n.拥抱 **accelerated:** adj.加速的;加快的/v.加速;促进(accelerate的变形) **paradigm:** n.范例;词形变化表

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English	Chinese
As an example, if any of you go to China, you will see it's almost **cashless** and credit card-less, because that thing that we all talk about, mobile payment, has become the reality in China.	比如说,如果你们其中几个去到中国, 你将会看到它几乎是无现金及无信用卡, 因为我们常常讨论的事物,移动支付, 在中国已成为了现实。[05:37]
In the last year, 18.8 **trillion** US dollars were **transacted** on	在过去的一年, 18.8万亿美金是通过移动网络来交

English	Chinese
mobile internet, and that's because of very **robust** technologies built behind it.	易, 而这归功于在其身后被建设的强劲科技。 [05:49]
It's even bigger than the China GDP.	它比中国的国内生产总值还更高。 [06:00]
And this technology, you can say, how can it be bigger than the GDP?	而此技术,你可以说, 它如何能比国内生产总值还更高? [06:03]
Because it includes all **transactions**: **wholesale**, channels, **retail**, online, **offline**, going into a shopping mall or going into a farmers market like this.	这是因为它包括了所有的交易: 批发、频道、零售、网上、离线, 如此般进入购物商场或是农贸市场。 [06:07]
The technology is used by 700 million people to pay each other, not just **merchants**, so it's peer to peer, and it's almost transaction-fee-free.	这项技术被7亿人用来互相支付, 不仅仅局限于商家, 所以它是点对点的, 而它几乎是无手续费的。 [06:18]

cashless: adj.无现款的;无钱的;不通过现金的 **trillion:** n.[数]万亿/adj.万亿的/num.[数]万亿 **transacted:** 交易/谈判 **robust:** adj.强健的;健康的;粗野的;粗鲁的 **transactions:** n.处理,[图情]会报;汇报(transaction复数) **wholesale:** adj.批发的;大规模的/n.批发/adv.大规模地;以批发方式/vt.批发/vi.批发;经营批发业 **retail:** vt.零售;转述/vi.零售/n.零售/adv.以零售方式/adj.零售的 **offline:** n.脱机;挂线/adj.脱机的;离线的,未连线的/adv.未连线地 **merchants:** n.[贸易]商人(merchant的复数)

English	Chinese
And it's **instantaneous**, and it's used everywhere.	它是即时的, 并在每个地点都被采用。 [06:29]
And finally, the China market is **enormous**.	而最终,中国市场十分巨大。 [06:34]
This market is large, which helps give entrepreneurs more users, more revenue, more investment, but most importantly, it gives the entrepreneurs a chance to collect a huge amount of data which becomes rocket fuel for the AI engine.	此市场巨大, 这给了企业家更多用户、更高的收入、更多投资, 但最重要的, 它给了企业家一个收集大量数据的机会 这成为了人工智能引擎的燃料。 [06:37]
So as a result, the Chinese AI companies have **leaped** ahead so that today, the most valuable companies in computer vision, speech recognition, speech **synthesis**, machine translation and **drones** are all Chinese companies.	结果,中国人工智能公司已往前飞跃, 所以如今,在机械视觉、语言识别、 语言合成、机械翻译和无人机领域中 最具价值的公司都是中国公司。 [06:54]
So with the US leading the era of discovery and China leading the era of implementation, we are now in an amazing age where the **dual** engine of the two **superpowers** are working together to drive the fastest revolution in technology that we have ever seen as humans.	所以有着由美国带领的发现时代 以及由中国带领的实践时代, 我们目前身处的时代是 两个超级大国的双联引擎正一同合作 来驱动我们人类从未见识过 最迅速的科技革命。 [07:11]
And this will bring **tremendous** wealth, **unprecedented** wealth: 16 trillion dollars, **according to** PwC, **in terms of** added GDP to the worldwide GDP by 2030.	这将会带来极大的财富、 空前的财富: 据普华永道称,16万亿美金, 在2030年,为附加至全球国内生产总值的 国内生产总值。 [07:32]

instantaneous: adj.瞬间的; 即时的; 猝发的 **enormous:** adj.庞大的, 巨大的; 凶暴的, 极恶的 **leaped:** v.跳跃/急速移动/剧增/突然移动 **synthesis:** n.综合,[化学]合成;综合体 **drones:** n.雄蜂;(英)懒汉;遥控飞机(drone的复数形式)/v.混(日子);懒散地打发时间(drone的三单形式);闲散度日(drone的三单形式) **dual:** adj.双的; 双重的/n.双数; 双数词/ **superpowers:** n.超级大国;超能力(superpower的复数形式);超级强权 **tremendous:** adj.极大的, 巨大的; 惊人的; 极好的 **unprecedented:** adj.空前的;无前例的 **according to:** 根据,按照;取决于;据...所说 **in terms of:** 依据;按照;在...方面;以...措词

English	Chinese
It will also bring **immense** challenges in terms of potential job **replacements**.	它也将带来巨大的挑战, 在潜在工作更替方面。 [07:46]
Whereas in the Industrial Age it created more jobs because **craftsman** jobs were being **decomposed** into jobs in the **assembly** line, so more jobs were created.	而在工业时期, 它创造了更多工作 因为工匠的工作被分解成 生产线中的各式工作, 所以创造了更多工作。 [07:52]
But AI completely replaces the individual jobs in the assembly line with robots.	但是人工智能用机械人 将生产线中的独立工作给替代了。 [08:05]
And it's not just in **factories**, but **truckers**, drivers and even jobs like telesales, customer service and hematologists as well as **radiologists** over the next 15 years are going to be gradually replaced by artificial intelligence.	而这不只是在工厂内, 而货车司机、驾驶员 甚至于像是电话销售、客服、 血液学家和放射学家的工作, 在未来的15年内 都将会慢慢地被人工智能所替代。 [08:12]
And only the creative jobs --	而只有具创造力的工作--[08:30]
(Laughter) I have to make myself safe, right?	(笑声) 我必须保护我自己,对吧? [08:32]
Really, the creative jobs are the ones that are protected, because AI can **optimize** but not create.	真的,具创造力的工作是被保护的那群, 因为人工智能可以优化但不能创造。 [08:38]

immense: adj.巨大的, 广大的; 无边无际的; 非常好的 **replacements:** n.替代,替换件;补充 **craftsman:** n.工匠;手艺人;技工 **decomposed:** adj.已腐烂的,已分解的 **assembly:** n.装配; 集会, 集合 **factories:** n.工厂,车厂(factory复数形式) **truckers:** n.卡车司机;从事货车运输业者 **radiologists:** 放射线学者/[特医]放射科医师(radiologist的名词复数) **optimize:** vt.使最优化,使完善/vi.优化;持乐观态度

English	Chinese
But what's more serious than the loss of jobs is the loss of meaning, because the work ethic in the Industrial Age has **brainwashed** us into thinking that work is the reason we exist, that work defined the meaning of our lives.	但比失去工作更严重的是失去意义, 因为在工业时期的工作伦理 将我们洗脑并灌输工作是我们存在的原因, 工作定义了我们生活的意义。 [08:45]
And I was a prime and willing victim to that type of	而我就是个典型并自愿接受 那种工作狂思想的受

English	中文
workaholic thinking.	害者。[09:02]
I worked **incredibly** hard.	我非常努力地工作。[09:09]
That's why I almost left my wife in the delivery room, that's why I worked 996 alongside my entrepreneurs.	那就是为什么我几乎将我的妻子独自留在产房内, 那就是为什么我996地与企业家们工作。[09:10]
And that **obsession** that I had with work ended **abruptly** a few years ago when I was **diagnosed** with fourth stage **lymphoma**.	而我对工作的痴迷在几年前 当我被诊断患上了第四期淋巴瘤时[09:18]
The PET scan here shows over 20 **malignant** tumors jumping out like **fireballs**, melting away my **ambition**.	这个正子断层扫描显示超过20个恶性肿瘤 向火球那样地跳了出来, 令我的夙愿逐渐地消失。[09:31]
But more importantly, it helped me **reexamine** my life.	但更重要的是, 它帮助我重新审视我的生活。[09:40]

English	中文
Knowing that I may only have a few months to live caused me to see how foolish it was for me to base my entire **self-worth** on how hard I worked and the **accomplishments** from hard work.	知道我可能只剩下几个月的生命 令我看清将自己所有的自尊 建立在工作艰辛程度以及努力工作的成就上 是有多么的愚蠢。[09:44]
My **priorities** were completely **out of order**.	我的优先事项乱套了。[09:59]
I neglected my family.	我忽略了我的家庭。[10:02]
My father had passed away, and I never had a chance to tell him I loved him.	我父亲过世了, 而我从来没有机会告诉他我爱他。[10:04]
My mother had **dementia** and no longer recognized me, and my children had grown up.	我母亲患上了痴呆症并从此认不出我了, 而我的孩子们已经长大了。[10:09]
During my **chemotherapy**, I read a book by Bronnie **Ware** who talked about dying wishes and regrets of the people in the **deathbed**.	在我化疗的过程中, 我读了布朗妮·维尔的一本书 述说了人们临终前的各种临终心愿以及遗憾。[10:16]
She found that facing death, nobody regretted that they didn't work hard enough in this life.	她发现面对死亡时, 没有人为自己在生命中 工作得不够努力而感到惋惜。[10:25]
They only regretted that they didn't spend enough time with their loved ones and that they didn't spread their love.	他们只后悔自己没有花足够的时间与爱的人相处 并且没有传递自己的爱。[10:32]

English	中文
So I am fortunately today in **remission**.	我今天很幸运地处于缓解期中。[10:42]
(Applause) So I can be back at TED again to share with you that I have changed my ways.	（掌声） 所以我可以回到TED 与你们分享我已经改变了我的方法。[10:46]
I now only work 965 -- occasionally 996, but usually 965.	我如今965地工作-- 偶尔996,但通常965。[10:59]
I moved closer to my mother, my wife usually travels with me, and when my kids have vacation, if they don't come home, I go to them.	我搬迁至母亲附近, 我妻子通常与我一同旅行, 当我的孩子们有假期时, 若他们不回家,我将到他们那儿去。[11:07]
So it's a new form of life that helped me recognize how important it is that love is for me, and facing death helped me change my life, but it also helped me see a new way of how AI should impact mankind and work and coexist with mankind,	这新的生活方式帮助我认清 爱对我来说是多么的重要, 而面对死亡帮助我改变自己的生活, 但它同时也帮助我用新的方式来看待 人工智能该如何影响人类 并工作以及与人类并存,[11:15]
that really, AI is taking away a lot of routine jobs, but routine jobs are not what we're about.	确实,人工智能带走了很多规律性工作, 但这些规律性工作不代表着我们]。[11:36]
Why we exist is love.	我们存在的原因是爱。[11:44]
When we hold our **newborn** baby, love **at first sight**, or when we help someone in need, humans are **uniquely** able to give and receive love, and that's what **differentiates** us from AI.	当我们抱着我们的新生儿时, 一见钟情, 或当我们帮助有需要的人时, 人类很独特地能够给予并接收爱, 这就是将我们与人工智能区分开来的事情。[11:46]

English	中文
Despite what **science fiction** may **portray**, I can **responsibly** tell you that AI has no love.	不管任何科幻有可能描述的东西, 我能很负责任地告诉你人工智能没有爱。[12:00]
When AlphaGo defeated the world champion Ke Jie, while Ke Jie was crying and loving the game of go, AlphaGo felt no happiness from winning and certainly no desire to hug a loved one.	当阿法围棋打败了世界冠军柯洁时, 当柯洁哭泣并爱着围棋时, 阿法围棋没有从胜利中感受到开心的滋味 当然没有拥抱爱的人的渴望。[12:07]

So how do we differentiate ourselves as humans in the age of AI?	那我们该如何在人工智能时代中 将我们为人们与其区分开来? [12:23]
We talked about the **axis** of creativity, and certainly that is one possibility, and now we introduce a new **axis** that we can call **compassion**, love, or **empathy**.	我们说到了创造性的轴, 当然那是其中一个可能性, 而如今我们介绍一个称为 同情、爱或同感的新轴。[12:28]
Those are things that AI cannot do.	那些都是人工智能不能做的事情。[12:40]
So as AI takes away the routine jobs, I like to think we can, we should and we must create jobs of compassion.	当人工智能带走规律性工作的同时, 我想我们可以、应该以及必须创造同情性工作。[12:43]
You might ask how many of those there are, but I would ask you: Do you not think that we are going to need a lot of social workers to help us make this transition?	你或许会问那种工作到底有多少? 但我想问问你: 你不认为我们将需要许多社会福利工作者 来帮助我们完成这段过渡期吗? [12:51]

Do you not think we need a lot of **compassionate caregivers** to give more medical care to more people?	你不认为我们需要许多富有同情心的看护 来为更多人提供更多医疗看护吗? [13:01]
Do you not think we're going to need 10 times more teachers to help our children find their way to survive and thrive in this brave new world?	你不认为我们将需要多10倍的老师 来帮助我们的孩子们 来帮助他们找寻自己在这个新世界中 生存和成长的方法吗? [13:07]
And with all the **newfound** wealth, should we not also make **labors** of love into careers and let elderly **accompaniment** or **homeschooling** become careers also?	有着这些新获得的财富, 我们不应该将爱的劳工变成工作的一种 以及将老人伴随或在家教育变成工作的一种吗? [13:17]
(Applause) This graph is surely not perfect, but it points at four ways that we can work with AI.	(掌声) 这个图表当然不是完美的, 但它指出了四种我们能与人工智能一同合作的方法。[13:30]
AI will come and take away the routine jobs and **in due time**, we will be thankful.	人工智能将带来并带走规律性工作, 同时,我们将感到欣慰。[13:42]
AI will become great tools for the **creatives** so that scientists, artists, musicians and writers can be even more creative.	人工智能将成为创造者很好的工具 所以科学家、艺术家、音乐家和作家 能够变得更有创造力。[13:48]
AI will work with humans as **analytical** tools that humans can **wrap** their **warmth** around for the high-compassion jobs.	人工智能将以分析工具的方式与人们工作, 所以人们可以将他们的温暖倾注于高同情性的工作。[13:57]

And we can always differentiate ourselves with the uniquely capable jobs that are both compassionate and creative, using and **leveraging** our **irreplaceable** brains and hearts.	我们可以用具独特能力 并同时是具同情心和创造力的工作 运用并影响我们不可取代的头脑和内心。[14:07]
So there you have it: a **blueprint** of **coexistence** for humans and AI.	所以你可以看到: 人类与人工智能共存的蓝图。[14:21]
AI is **serendipity**.	人工智能是凑巧的。[14:27]
It is here to liberate us from routine jobs, and it is here to remind us what it is that makes us human.	它的到来是将我们从规律性工作中解放出来, 它的到来也是提醒我们是什么使我们成为人们。[14:29]
So let us choose to embrace AI and to love **one another**.	所以让我们选择欣然接受人工智能并彼此相爱。[14:36]
Thank you.	谢谢。[14:40]
(Applause)	(掌声) [14:41]