

顶目背景 推动ESG "漂绿"识别平台的进一步发展

随着ESG投资兴起,如何有效识别和防范"漂绿"行为成为重要挑战

EcoTruth "漂绿"识别平台

目前处于发展阶段,但增长潜力巨大

政策驱动

为打击"漂绿"行为,加强监管力度,中国政府出台《关于构建绿色金融体系的指导意见》等政策,为ESG"漂绿"识别平台在国内市场创造了有利政策环境。



投资者参与度提高

投资者对ESG投资理念的 **认 可度**不断提高,越来越多的资金流向绿色金融市场。投资者 **参 与度**提高后,对ESG相关数据的需求会更广泛且深入。

全球气候变暖 环境污染问题

可持续发展理念

技术创新驱动

LLM、GraphRAG技术和大数据 等技术在平台上的应用将不断深化,并改善信息披露机制,更加重视 ESG数据的真实性和准确性,精准高效识别"漂绿"行为。

国际合作加强

各国共同推动全球绿色金融市场的繁荣与发展。目前,一些国际组织和机构正在推动国际合作,分享经验和数据,共同提高"漂绿"识别的能力。

绿色金融 防止"漂绿"

EcoTruth

行业痛点 存在问题及相关壁垒

技术

水平有限 🔻 隐私保护

可靠性问的数据疫量

数据不完整

数据来源分散

数据统计口径不一致

数据获取

存在误差



缺乏客观性

权威性

评估方法差异大

缺乏统一的漂绿认定标准

不准

彩和

一方法

与企业存在利益关联

影响独立性 公正性

利益冲突

未严格审查 受投资者和市场压力影响

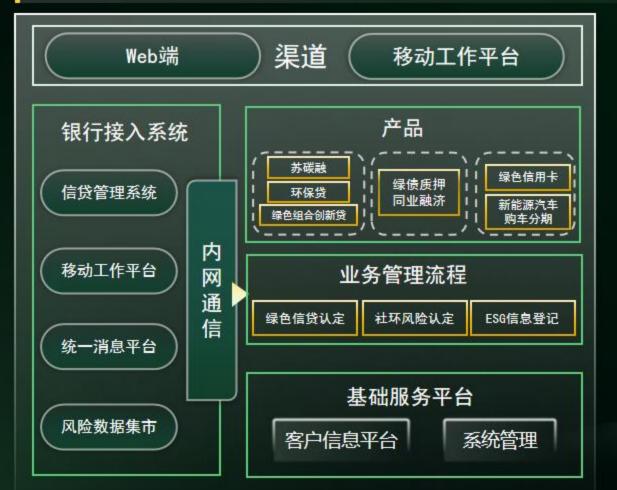
降低"漂绿"识别的准确性 阻碍平台运营

忽略"漂绿"行为。 扰乱市场秩序、增加投资者风险

项目简介 解决方案

EcoTruth"漂绿"议则平台融合LLM与GraphRAG技术

平台旨在为ESG投资相关方提供精准可靠的漂绿甄别服务,并出具漂绿识别报告,明确企业的漂绿等级,精准定位风险。





本团队研究采用 LLM+GraphRAG系统

将ESG指标作为识别标准

实现"漂绿"行为识别

项目意义 研究意义

对投资者价值

对社会价值

对国家价值

ESG 公認治理 对ESG投资者和社会公众 规避风险, 科学决策

对银行等金融机构 降低成本。保障资金安全

引导资源合理配置

推动企业可持续发展

提升全社会福祉

助力绿色金融发展

推动政策制定与完善

促进经济可持续发展

加强市场监管

WINDONMENTAL



ESG

COVERNANCE

EcoTruth价值导向

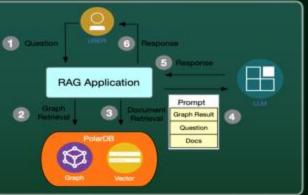
22

创新之处 独特的创新点

技术引用层面

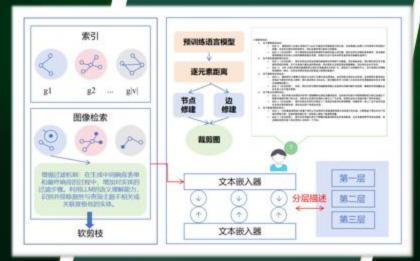
GraphRAG 技术融入 **自然语言** 生成,自动识别分析 多文档,提取核心信息,比对上下文形成报告。

异常点检测模型 可自动识别ESG数据中偏离行业基准的企业行为,通过多维度指标分析和聚类算法捕捉偏差。

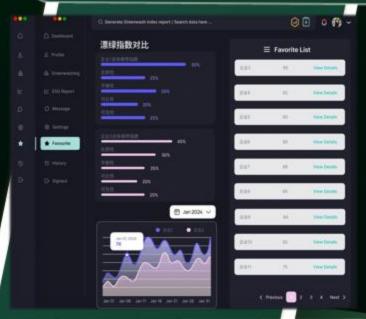


流程应用层面 数据 收集 数据 分析 风险 议别 全流程管理





GraphRAG 核心工作流程



张大的可视化工具

流程模式筛

筛选出真正的ESG绿色项目,提供用户进行投资

识别阶段

申请信贷的企业项目

- ·提供的申报书或贷款请求书
- ·结合已公开披露的信息

GraphRAG技术

识别是否为绿色顶目

许级阶段

顶目ESG漂绿评级 / 生成报告

银行是否审批贷款 投资者是否投资,提供参考

石期维护阶段

异常点检测 实时监控

出现弄靠

- ·考虑是否回收贷款
- ·信息披露给投资者



构建知识库 数 k跳自我 图检索 软剪枝 据导 图的索引 构 建 结 合 使用修剪的文 ESG和金融 本子图生成 数据的Graph

LLM生成分析报告

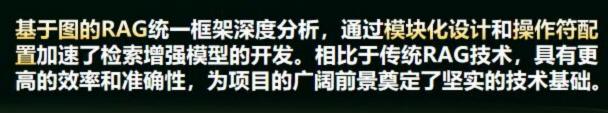
知识图谱与Agent结合

OddBall异常检测

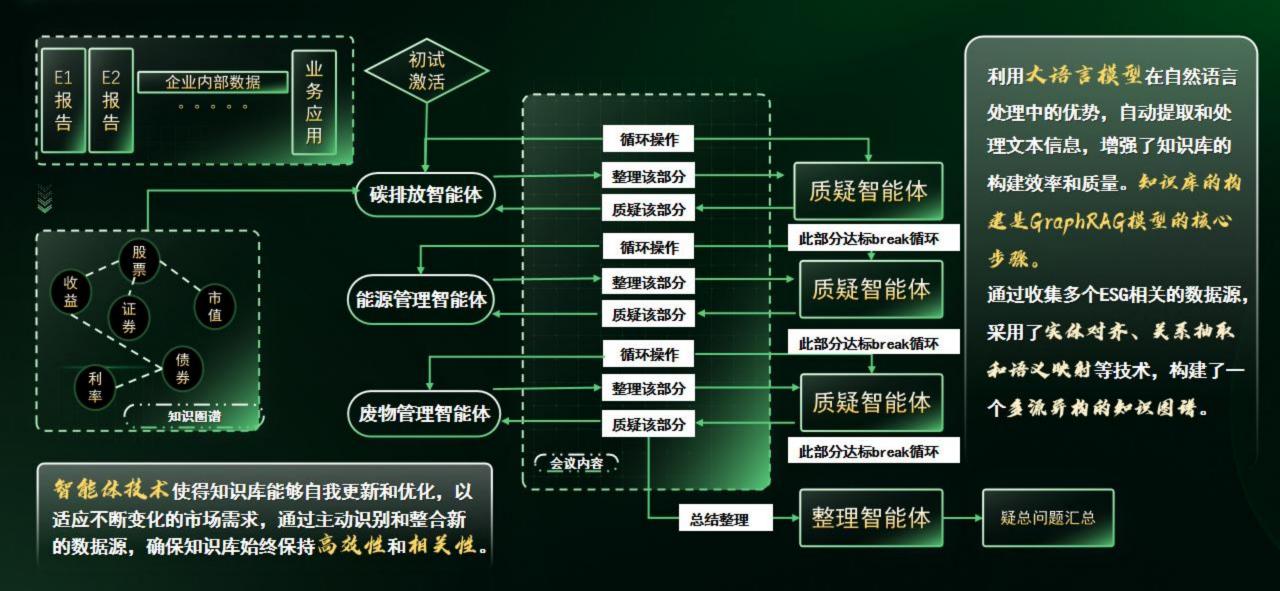
①定义评估指标

$$out-line(i) = \frac{\max(y_i, Cx_i^{\theta})}{\min(y_i, Cx_i^{\theta})} * \log(|y_i - Cx_i^{\theta}| + 1)$$

- ②引入LOF方法 (out-lof部分)
- ③集成out-line和out-lof (out-score部分)



知识图谱与智能体交互



知识库构建

智能营销 智能风控 智能管理 监管合规 深析客户行为模式) 智能合规检查 业务应用 风险预测与建模 资源智能配置) >>>> 辅助运营优化 个性化推荐 自动识别与预测 智能预警 知识存储 知识入库 知识管理 知识标准化 知识分类 7777 知识校验 校验方法设计 校验方法验证 校验方法管理 ~>> 任务模块 Prompt仓库 Prompt设计 Prompt评测 底层模型 >>>> 实体关系抽取 算力管理 大模型部署 大模型仓库 事件抽取 外部数据 内部数据 >>>**>** 数据采集

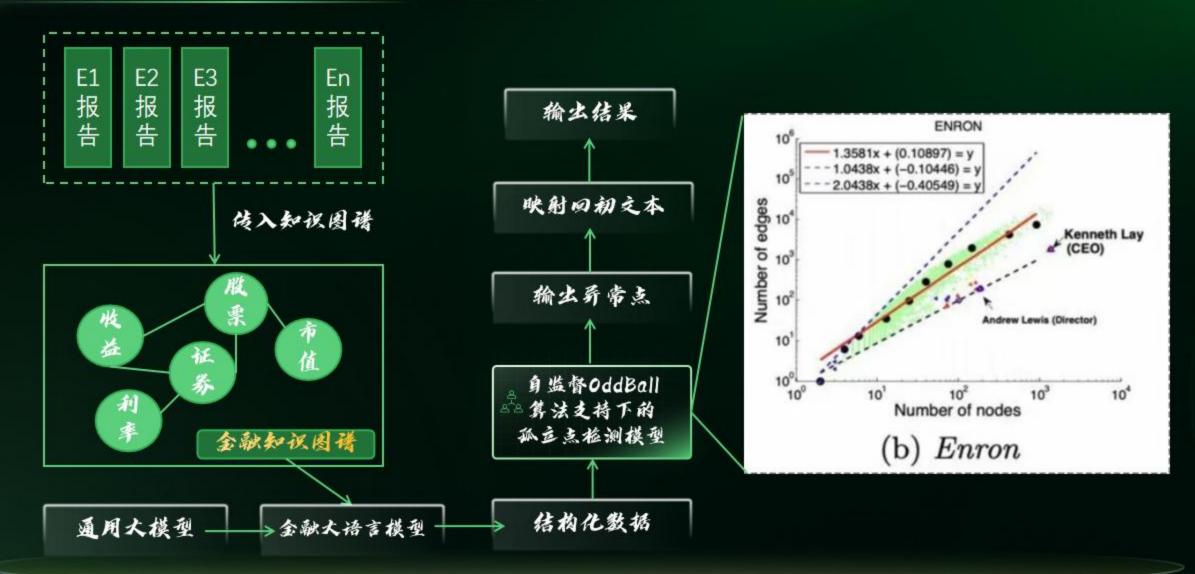
处罚类数据

结构化数据

非结构化数据

监管类数据

异常点检测与知识图谱交互



平台模式 王方共用



投资者

ESG投资分析与决策支持、漂绿行为识别 与避免、数据透明度与信任度提升、市场 趋势与风险评估、企业ESG表现监测



企业

ESG数据评估与分析、漂绿识别与防范、提升ESG投资透明度与可持续性、辅助 ESG投资决策、监测社会舆论与口碑



银行

银行使用EcoTruth平台,可用于绿色信贷评估、风险管理、客户筛选、投资组合优化、创新金融产品设计



投资者使用



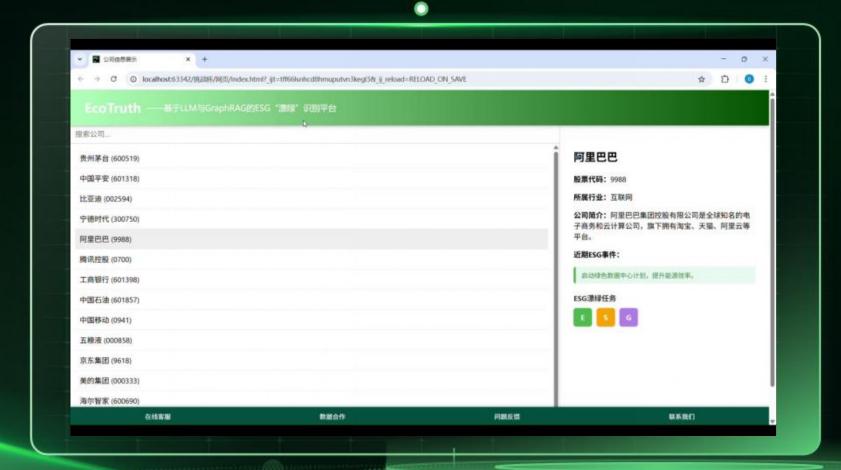
企业自用"漂绿"识别系统



银行内部"漂绿"识别系统

实地案例

通过结合大语言模型,提高了"漂绿"识别能力





技术支持——金融科技创新实验室







致力于探索金融科技前沿技术, 打造金融科技学术基地



金融科技利新实验室 Fintech lab (近宁省重点实验室)

金融科技学院



联合研发技术中心

二零二三年 九月

实验室已发表SCI论文30余篇 取得多篇专利软著



at Multiple Criteria Model in Transfer Learning for Cross-domain

Kalyu Huang, Degen Huang, Zhuang Liu and Fengran Mo

Natys Huang, tregen manner, carriang care arm exception. School of Computer Science, Dalian University of Technology (kaiyubuang, abuanglis, fengranna) (mai 1, dist., edu, cs

on three popular datasets

usits may lead to different feature.

representative reason may test to detected reason (CWS) is or constral task, which will rightformly

affect the effectiveness of descriptions Course

NLP tasks. Recently, the approaches for CWS

have already achieved a good performance in large

scale associated corpora, as reported by related to

searches (those and Zhao, 2017, Zhao et al., 2019).

Most of the effective appearables fall into two mis-jer meanth falls: the statistical machine learning

method and the neural network method. The for-

ment is marely based on Conditional Random Fields

(CRF), which is considered as the most effection

statistical machine learning method for CWS (Zhao

and Kit, 2008; Zhue et al., 2010. However, the

statistical machine learning method always bear

dy relies on hand-craft traders. To meaning the

efforts in feature engineering, more and curre st-

love on armal newerk method (Pei

Worklevel information in important in mah-ital language paccassing (NLP), ospecially for the Chann language due to dight languis-tic complexity. Channe word segmentain (FWS) is at content task for Channe down-lesson NLP state. Existing confeed, hast al-seroes NLP state.

CWS on large-scale associated corpora. However, the accuracy of the method will drop dra-

ever, the accuracy of the execution of computer manufacture as handles as unsegmented use. With him of can-of-recolubatory (OCV) words. In addition, there are many different supports

to address, these or many account segmentation criteria for addressing different requirements of descentrum. SLP tasks. Examinations of endels with uning deficient criteria.

will practite the explosive practs of the to

neiers. To this end, we propose a joint oriusia randel that shares all parame-

i integrate different supractation criteria ser model. Besides, we unline a tomolor

ing method to improve the performance

n makepis henchmark datasets (r.g. Euler 2001, Eulerell 2008 and SXCHAN 2010s.

Interdisciplinary Contest In Modeling Certificate of Achievement

Be It Known That The Team Of Jiatong Liu Junnan Liu Yong Ma With Faculty Advisor Zhuang Liu

Dongbei University of Finance and Economics

Finalist



(AMS ASA) INTONIOS MAA SIETIL

Multi-Task Deep Neural Networks for Multi-Document Reading Comprehension

China Peredonin Maurish Procusement Center China National Petroleum Cosposation Shenyang, China

shiethespe conses Wayer Lin
University of Scothern Cultivaria
Los Angeles, CA 90000, United States
unystation with its general comSchool of Applied Finance and Behavioral Science Douglet University of Finance and Economic Surbrung@defe ebn en

Union Mobile Financial Technology Beijing, China shanjan 1978/0 126.com

vies machine reading conquehension on real-world web-

Alshawi-Malakian Karding Comprehension (MEC) in a chal-longing waters tomograp protein to quick the small has become and underwindend production to quick the small has become for the comprehension of the comprehension

In question assessming (QA) constantly, as a challenging talk, Machine Realing Computeration (MRC) is a challonging task in some language processing (NLPs, alone at uniforms to read a given unstructured section and ally provide answers to questions based on it. This

tunt milestone is that some MRC neural network As important milesters in that were MHC record network processes have surpassed the human performance on the expensive Network and MHC shared [5]. However, and the processes of the MHC shared [5]. However, the processes of the second on a safety of the processes of the second on a safety. I making congression. The success on single excessed years, maked to the not adopted, considering in the behinder good of machine studied the realistic with data Therefore, latest distances (1), (2) attempt to design the MRC. task in more real-world settings by involving search engine. to real these decrements to give the final assets. New problems uses as we now consider the tank of machine

penable has quite consesse. As it is shown in Figure 1, we position but quite constant. As a se section of the section give an example of multiple decreases muchase teacher comprehension dutient (i.e., MS.MARCO [I]). As we can

for the question, they need to read from document 1 to document 7, to give the treal asswer. Hence, as rich contest toraligie documand provided for each question, the same govern coals. or more than one time is different documents, or even

occur were than one time in defected their at different places of the came document. melt regis decement MRC in that since the questions.

In the paper, we present a 'pre-draining' e-'post-origining' e-'fost-causing' three-stage paradigm. to the paper, we present a pre-presency + post-training + year-training + year which is a supponentary transecore, for the contains pre-entering a parental original approach. Furthermore, based on three-stage paradigm, we present a language model of the contains a language model or the contains a language mod model approach. Furthermore, named on three-stage persongs, we present a sanguage moon samul PPRERT. Compared with original BEET architecture that is based on the standard twosamed PPREETC, Compared with original BEET architecture that is based on the standard two-tom practices, we do not line-base pre-trained model directly, but rather positions is on the description and advantage from the basis before the present of the present o stage paradigm, we do not har-same pre-trained enters denote, that range post-same in in the domain or lask related dataset first, which helps to better incorporate unit-assumences largedoesne er taak refused didatel troe, waten teeps to techn teceptorist tasse-personen tassel-olgs and demaid-newscoress knowledge within pre-trained trackel, also faces the training dataset onge and contrade-over contract according to the property of the contract of t notice but. Enterence experimental results staticate that proposed model improves the performance of the baseliness on 24 NLP tanks, which includes eight GLUE baselmanks, eight Samuranes and the baseliness on 24 NLP tanks, which includes eight GLUE. More recognition of the baseliness of the baseline nance of the business or 24 NLF tasks, which includes eight GLUE bondmarks, eight Su-perGLUE bundmarks, six extractive question asswering bundmarks. More remarkably, our perGLU: benchmarks, six extensive question genuering benchmarks. Most returnlishly, say proposed model in a more flexible and plaggable model, where post-starting approach is able to advantage later, about 16 kb, the second of the later of prepared model is a more flexible and pluggable model, when pent-maring approach is able
to be plugged into other PLMs that are based on BEKT. Extremore ablations further validate the to be plugged into other PLMs fast are based on BEET, Entensive ablations lattice validate the importance and its state-of-the-ort (SOTA) performance. The open source code, pre-trained entelsion and non-translated entelsion provided markets are provided conducts.

A Robustly Optimized BERT Pre-training Approach with Post-training

Zhuang Liu^{1,1}, Wayne Liu², Ya Shi³, Jun Zhao³

Zamang Law", Wayne Law", Ya Shi", Jun Zhao" "Dongbei University of Finance and Economics, Dalian, China

*University of Southern California, LA, USA

³Union Mobile Financial Technology, Beijing, China

*IBM Research, Beijing, China

mendels and post-trained models are available publicly.

Recently, the introduction of pre-trained language models (PEMs), including GPT (Radiond et al., 2018).

REST Oberlin of al., 2019), and \$2.36c (Nanco et al., 2018). Receifly, the lattrobuction of pre-trained language models (FLMs), recluding GPT (Rachinel et al., 2015).

BERT (Declin et al., 2015), and ELMs (Neurot et al., 2015), among usup others, has achieved at mean-

MERT (DINTO et al., 2019), and \$2.500 (Plates et al., 2018), among many others, has achieved brames as assess to the natural language processing (NLP) recents. Typically, the basic structure of such a supply of the contract of the contrac one necessa to me nutural tanguage processing (NLP) research. Typically, the busic structure of such a 1 face tentes the successive stages, one cup thereight pre-maining places and sewber one desire. The tank the pre-maining stages. model consists of two successive studes, one sup carend the pre-training phase and another cup during the fine-tuning phase. During the pre-training phase is pre-training con unsupervised dataset foreign during the pre-training phase. the Non-tearing phase. Ourney the pre-waining phase is pre-maine on unsequencied detained feeling the date of the feeling phase is fore-based on determined supervised SLP teach. Up to now, these sendons the feeling phase is fore-based on determined as a pre-part of the feeling phase is fore-based on sources NS I study. Upon one date of the feeling phase is the feeling phase of the feeling phase of the feeling phase is the feeling phase of the fee during the face luming plane it face, hance on downsteran supervised NLP tasks. Up to now, these mades and the best performance on varieties NLP tasks. Some of the new prominent examples are EEEE.

AND WE'VE hand forward VI Coulom of Notice At Secret VI council 1990s. These or Manager VI council 1990s. obtained the best performance on various NLP tasks. Some of the usest preminent examples are BERT, and BERT hared SpanNERT (Lobit et al., 2019), ALBERT (Lase et al., 2023), These FLMs are triated on and MEXY based Squatteric Quarter at , 2019, ALBERT Q. as of al., 2020, These FLShs are transed on the days unsupervised corpus through some unsupervised training depoints. However, it is not absented the days of the confidence of the days of the confidence of the the large unsupervised corpus through some unsupervised training objectives. However, it is not obsessed that the model parameters which is obtained during supervised pre-training planer can be well-usual that the enodel pursuences which is obtained during unsupervised pre-training place can be well-united to support the first kind of transfer learning. Especially theiring the time-maning places, for the surpor N.P. and order a result surmous of appropriated test data is provided. Since appears the non-account results are not to support the time tend of transfer tearning. Especially many the transmining finant, for the larger ALL.

In the contract of support and the contract of the and, only a small statement or supervised text data to generate, two-massing the pro-massed content and particularly hereits. And for the pro-spaced needs, supervised functioning requires substantial amounts of the pro-massed content and particular decreases and particular decreases and particular decreases are decreased as a function of the transfer of the transf tentially heals. And for the pro-mutated model, supervised ten-turing sequence substantial amounts of land-specific supervised training dataset, not always possibile. For example, in GLEE boxchroads (Wing) und-specific supportuned training distance, not always assistance. For example, in OLUE foundation (Wang) of the 2019th, Winnegrad Scherme Salmeri (Lecrosper et al., 2012) have only 658 training data, two small for firm et al., 2019h), Wasoprat Scherm dataset (Levesage et al., 2012) have only 634 training data, too small for fine-mering nuteral language inference (NLI) task. Moreover, although PLMs, such BERT, can lorn

♦ R 9, 11.2000 1 2010HL1 於照申請刊: 2000年11月10日 WHIRL AL SHREAD 施 被,11805 至宁省大阪市办河10区为1801至7年 据报录会员, 2001年使任卫员 据报录会专, 15 卫达6588 7 原定知识产品和原本中分人及者如果中的品质(由中等性 お見を中を抗し、意見を 事を中の出る事業を引き込まされる場合。 专利品及様式から近近地名を 专用本配出来 とのは、 中国中间设置的基本的实际成本中。 为一定时间至高。 中们中国保险中间的原则对应通信区区、专利的指数中。是有一定是一些点,这是由专 业区人们是是是有一定道。成立是是董爷也已是是专用你还是二。





Dual Head-wise Coattention Network for N Comprehension with Multiple-Choice Que Kaiyu Huang

Dallan University of Technology Delian, Lisoning Province, China

Zhuang Liu Union Mobile Financial Technology

lozebrong@umintech.com

10.5, waxes as a susque uses vaccine account as for the frequent frequent to perform und tiple-choice MC task. Our propose. as exemple, but also models the 2tt. relationship is nontanal mechanism straightforwardly, by brad-wise transching and aggregating method on unditiple layers, which better undeprinting and passed process and passed. continued with large procusion language models use officiency. To evaluate the performance, we trust our pro-port model on five challenging and well-known distance for sulfapin-charge MC, RACE, DREAM, Science-2018 Task 1, OpenBookQA, and TOEFL. Extensive experimental re-Appendix on the control of the contr necesses in accuracy comparing entiting models based on all five datasets, and it consistently corportants all needs baselines including the state-of-the-arts techniques. More mercinis carriering the scanoca-tinoaria tectanques. More marchably, our proposal is a phaggable and more flexible

Multiplescheire Machine Comprehension (MC) is an impan-ABSTRACT autoripressioned automate comprehension (price) is an injuri-tiant and challenging nature language processing (NLP) task where the mackine is required to make the best assume from where the manuse is required to make the best assume trees, consolidate assume set, given particular possage and question. Existing approaches either only utilize the powerful pre-trained inagange models or only rely on an over complicated trialed imageage models or only rely on an oner compalicator, matching network that is, design appeared to experience of matching network that is, design appeared to experience of the concludes answers. In this paper, we present a need of concludes answers, in this paper, we present a need of confidence answers. In this paper, we present a need to confidence of the conf actuatecture, trust meanware controvarion security qualed the HCD, which is a simple and efficient attention neural network designed to perform multiplicables MC task. Our proposed DGC and only support a powerful pre-trained language and sensitive was consider, but also models the MC relationship as attention. remarkably, our progenal to a proggator and smore neutrino model, and it thus can be plugged into any pre-trained Lan-guage Models based on BERT. Abbation studies demonstrate of the set performance and generalisation.

In this power-gring unsupervised Transite same work the issue by leveraging unsupervised Transite as work/see Multi-task caraing. Word embedding, such as work/see Multi-task (2013) is a method of extracting amounted to the property of the power of the property of the pr There is growing interest in the tasks of finan-There is growing interest in the tasks of finan-cial text mining. Over the past few years, the progress of Natural Language Processing (NLP) based on deep learning advanced rapidly. Signif-tasks of the processing advanced rapidly. based on deep learning advanced rapidly. Significant progress has been made with deep learning showing promising results on financial test mining studies. However, as NLP models require large models. However, as NLP models require large models for financial test mining data, applying deep financials of financial test mining is often unsuccess. amounts or raceicu training tana, apprarag ucop-learning to financial text mining is often unsuccess-ful due to the lack of labeled training data in fiof financial test mining, due to the large differences in vo-closed and expression between the financial corps; and the spenral domain corpus, they still cannot be effectively ap-peared to financial data. Furthermore, the pre-training of PLMs usually focus or training the model through a cis surprise tasks. For example, BERT used MaskIAM and NSP as pre-trained and the properties of the second-state of the pro-trained dispersions. Linearouse in first exembalators amounted ful due to the lack of labeled training data in It-nancial fields. To address this issues, we present FinBERT (ISPET for Financial Text Mining) that is a down specific language model pre-trained in large-manifecture of the pre-training and ent from BERT, we constitute its pre-training tals ent from BERT, we constitute its pre-training tals of the pre-training tall the pre-training talls. tasks. For example, MEKI uses 54a84L54 ana 5507 as pro-training objectives. However, in fact, vocabulary, semantics, entence order and proximity between sentences, all of which can enable the PLMs to learn more language knowledge and can enable the PLMs to learn more language knowledge for fient from BEKI, we construct six pre-training tasks overing more knowledge, simultaneously trained on general corpora and financial domain corpora, which can enable FinBERT model better to cap-shield and company to the construction of the con-trained by the construction of the con-trained construction of the con-trained contract of the con-trained contract of the con-trained contract of the con-tract of the of the con-tr can enable the PLMs to learn more language knowledge and semantic information in the training corpus. Especially for financial text data, for example, named entities like stock, bond when can chance runners moder occurs to cap-ture language knowledge and semantic informa-tion. The results show that our FinBERT outper-

semanuc internation in use usaming dentifies like stock, bound annicial text data. for example, named, entifies like stock, bound type and fusancial institutes an example, contain unique vocated by a more proposed of the proposed proposed training characteristic information in large state proposed p In finance and economics, various financial text data are used a unance and economics, various maneral text data are used analyze and predict future market trends. Whether for an In summary, the main contributions of our paper are the to analyze and predict future market trends. Whether for an-alyst reports or official company amountements (mancial lexibility) and the state of the state of the state of the state of financial lexibility (market). As the state of the state of the Analysis of the state of the An unprecedented number of such texts are created every day, so for any single entity, manually analyzing texts and so for any single entity, manually analyzing texts and so for any single entity and them is almost an extremely sufficient text. A viduaried in machine learning texts and properties of the superior of the superior of the properties of the superior of the superior of superior of the superior of the superior of superior of the superior of superior of the superior of superior made nnanciai text mining insues in Fit teen pussione. Five-ever, in financial text mining tasks, constructing supervised ever, in financial text mining tasks, constructing supervised to see that the probabilities of the second construction to use of expert knowledge in finance fields. Therefore, the to the small amount of labeled training data that can be used for

FinBERT: A Pre-trained Financial Language Representation Model

FinBERT is the first domain specific BERT that is pre-

FinBERT is the tirst domain specific BERT that is pre-trained through multi-task learning on financial corpora, to transfer knowledge from financial domain corpora.

Our FinBERT model differs from standard BERT in the

Our FinBERT model differs from standard BERT in the training objectives. We construct six self-supervised pre-training tasks (subsection 2.2), which can be learned

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*Ijiuzhuang.dluf@gmail.com, ²huangdg@dlut.edu.cn, ⁴huangdagwail.dlut.edu.cn, ⁴huangdagwail.d financial text mining tasks, most financial text mining models financial text mining tasks, most thanceal text mining mouse,
unned directly utilize deeper learning technology.

In this paper, we propose finite Timble Mades and
the issue by the everaging usupervised Transfer and a surface of the state of the state

tion. The results show that our FinBERT outper-forms all current state-of-the-art models, extensive experimental results demonstrate the effectiveness and robustness of FinBERT. The source code and pre-trained models of FinBERT are available on-

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CCS CONCEPTS Computing methodols ing Information ex

KEYWORDS Attention, Neural Netwo rebension, RACE.

eng Lim, Kanya es. 2020. Dual Head-engelscarion with Mu of the 29th ACM Interes

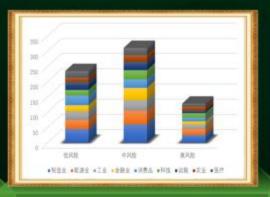
INTRODUC The objective of Ma. natically provide to facet text or passes topic in matural lang. has been widely sti-that in the NLP case gehendon can be of applications of to of MC can be easi of MC can be can automatically pro the given text. For sources for MC ti to use. Generally, MC as RACE

项目成果 已取得成果

技术成果









核心代码

搭建全面知识库

风险评估报告

平台搭建

应用成果





项目团队共有人 份发明专利、2 份实用型专利、12 份款著

项目成果 已取得成果

构建漂绿紫侧库

制作多无化碳排放可视大屏





财务计划 项目经费预算与支出





赤来规划 短期-中期-长期计划

条例分析

市场推广

商业合作拓展

¥ 94

1.1份银与目标

随着全球 825 投资的快速发展,它别和量化企业的特色表现及潜在港埠行为成为金融机构和投资者的重线 任务。本项目皆在强过金融科技手段,构建特学的港埠指数,以进升埠也温龄的透明度和可會性。项目 取取時机名企业 Lulvaleson 作为常例,深入分析其在 825 万面的表现与港埠风险,为金融机构提供未能 持工具。

1.2 Lululeson 案例研究

1.2.1 案例背景

Euloul-mon 作力加度大知名的运动搬货品牌。日 2000 年起推出"Be Planet" 置領运动。非被百斤保万器 京取积极措施,但越减シ温度气持排放。使用可两生能源等。此而,2024年7月,加度大是于封超升好保 组织 Hand-nasth 提交的投诉接合,正可如 sull mans 展开调查、接收具存在"港棒"行力。

1.2.2分析方法:

本项回信含系式聚型大学金融相技实验室(Pinterlat.ib)的研究规果和大连查福马科技有限公司的技术支持。采用CC下步骤进行 Lubuleson 的是理指数分析:

(1) 神塔斯湖

- 基于漢學指數评分種類。対 Lulul sace 約 800 接着从交換性、平衡性、可比性和可及性固个推進分析 ・ 文質性、 (4.0 と) - 1 - - - - 原子の連絡がもの変化が無温が出来します。
- 平衡性。考察 Led all sease 是否较重选模环境负责条响、社会消费影响和公司治理缺失。影响和公司法理缺失力对某项特行为的证据。
- 阿比特, 评估 [a] a) seess 是因全面披露透绿行为重化指标。是否提供连续三年的历史数据及与 额行业或网络会业的计划数据。并对核计口径像出明编组明。
- 可及性, 检查 Lululanam 的 #如 报告是否与年度财务报告同步发布。确保使用者能够便捷、及时、快速获取相关信息。

(2) 数据采集与整理。

整合 Lululeann 約官万年报、ESO 报告、第三方评级机构数据、媒体报道及政策法统文件,确保数据的企 图性和理确性。

(3) 技术与方法领售:

Crapkst 模型。利用 Crapkst 技术,从基督的化文本中搜取关键 #24 信息,构建知识图谱,识别 Lululesses 信供的研究性,非种类提及物理环外中的关键问题。

資常点檢測。結合資業点检測技术,特记 Univiewed 例应链基室气体排放的异常增长,识别其准律问

BS评估 Lulul exon 在环境(B)、社会(S)和治理(G)推度的表现,通过评分标准计算其遵理指数

- 实践性:80分,部分议题披露规范,但对重大排放事件的改善排除未具体说明。
- 平衡性。70分。对环境和社会范围影响的披露不足,未详细阐述机匹及整改档
- 阿比性: 60分, 英雄排放指标未覆盖完整所史数据, 统计方法说明不明确。
 阿比性: 90分, 报告发布时间见时, 预取适准各样化。

BiF分为 75分,显示 Laluleson 的 EXI 提告存在中等程度的連续风险,需进一步加强对真实绿色绩效的扩展。

1.2.3 意义与价值

本案例表明、结合漆蜂指数标 Graphtan,异常点识别等近半的分析程率能够有效量化企业的绿色表现更更, 为银行和设治者提供可靠的关系体置。通过系统性分析和技术手段,显著提升了 250 评估的通明度和复模 性。 社交媒体 网络平台 公众号

线上

学术论坛 行业展会 研讨会

线下

技术优化升级

试点运行反馈 用户需求变更

全方位, 多层次



金融机构合作

嵌入投斫与风控流程

API接口嵌入服务

定制化风控模块服务

数据订阅服务

第三方服务商联盟

数据与认证互补

战略联盟

联合认证



漂绿花性认证

团队优势 成员情况



刘 指导老师

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- 曾任职IBM、支付宝

顶目成员

刘佳妮



项目负责人,大创赛中获得 省级结项,挑战杯获得省金 奖和校一等奖,工行杯省三 等奖,兴业杯北部赛区24 强等。曾获校三等奖学金。

刘芮彤



大创省级结项,互联网+校金 奖以及国奖,挑战杯校级、省 级奖项,获得两次数学建模省 奖,"东方财富杯""企业模 拟大赛"等校级、省级奖项。

马玥瑶



曾获国家奖学金、校一等综 合奖学金、东方财富杯国家 级三等奖、亚太数学建模国 家级三等奖、兴火燎原马拉 松挑战赛北部赛区优秀奖、 丁行杯省三等奖等多个奖项

施舒晴



大创校级和省级项目结项、获挑战杯校赛三等奖、获税法知识竞赛决赛—等奖、三下乡社会实践活动校级奖项、多次获得校级奖学金。

梁寒梅



互联网+校金奖, CGMA 省二等奖, 数学竞赛省三 等奖,企业竞争模拟大赛 校一等奖

- 荣获大学生创新创业大赛、金融科技创 新大赛等国家一等奖,有丰富竞赛经历;
- 具备数据分析和建模能力,熟练掌握各种经济预测以及金融有关的模型,并广泛学习银行基于智能化推荐的有关模型。
- 项目组成员积极研究金融科技领域,财政税务领域等,如区块链技术、数字货币、在线支付系统等。
- ▶ "工行杯"省级三等奖
- "兴火燎原"创新马拉松竞赛北部 赛区24强

