Writing & Academic Norms

Academic Misconduct: Cheating, Plagiarism, etc.

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Course materials: https://mmcheng.net/writing/

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Science: " science consists in grouping facts so that general laws or conclusions may be drawn from them." 1

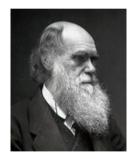


Fig.: Charles Darwin (1809 - 1882).

https://www.biographyonline.net/scientists/darwin-quotes.html

Writing

$$Research = Re + search$$

- Scientific research is a process of creating, reorganizing and updating knowledge, as well as creatively using knowledge in new domains.
 - Novelty: creating > updating > use in new domains
 - Re-reorganizing: review paper

Academic paper: " ... contains original research results or reviews existing results. Such a paper ... will only be considered valid if it undergoes a process of peer review by one or more referees (who are academics in the same field) who check that the content of the paper is suitable for publication in the journal."

²https://en.wikipedia.org/wiki/Academic_publishing

Writing

Not only for the community, but also for your career

- Writing ability is obviously important for research jobs
- The ability of writing is also essential for other jobs
 - Ability to propose a new project
 - Ability to arrange research plan
 - Ability to justify results
 - A tiny project to mimic your career development

What's Academic Misconduct?



http://www.moe.gov.cn/srcsite/A02/s5911/moe_621/201607/t20160718_272156.html



大力弘扬优良学风,营造风清气正的学术生态

——教育部有关负责人就《高等学校荷防与处理学术不端行为办法》签记者向

2016-07-10 本項: 熱療部

当前位置: 首市 > 新闻 > 政策解读

为深入贯彻贸的十八大和十八届三中、四中、五中全会和习近平总书记系列重要讲话精神,全面推进依法给 校,有实现防尔和公法规论处理商等学校发生的学术不漏行为,靠造风清气正的学术环境,促进教学科研和学术研究 的健康发展,教育部验定了《商等学校经历与处理学术不漏行为办法》(以下商称《办法》)。日前,教育部有关 布表人旅研究制定验文中的存年者信仰部下了港的顺向。

1.间: 教育界、学术界对于学术不嫌行为的预防和处理工作十分关注、请介绍一下《办法》起草的背景

答:优良学风是大学精神的集中体现,是高等学校的立校之本,风肃气正的学术生态是科学发展和教育事业兴 旺的基石,在近一个时期以来,高校学术不编行为时有发生。助长了象功近利、浮眼浮夸的学术风气。造成了极为 负面的社会黎明。为此、教育部近年来先后出台了《关于严肃处理高等学校学术不编行为的通知》《关于切实加强 和改进高等学校学风建设的实施象见》《学位论文作歌行为处理办法》等指导性文件;很多高校制定了处理学术不 继行为的规定事故分和需求了一眼不够行为发化。

对待学术不端行为,教育部及各高校的态度历来是明确的,就是"零容忍"。但在实践中也存在着查处学术不

端行为的依据不足,工作机制不完善,调查处理程序不规范,不同高校处理标准差别较大等问题,极大地制约了学

http://www.moe.gov.cn/jyb_xwfb/s271/201607/t20160719_272240.html

教育部:"对待学术不端 行为,教育部及各高校 的态度历来是明确的, 就是"零容忍"。但在实 践中也存在着查处学术 不端行为的依据不 足···"

Consequences of Academic Misconduct?



Fig.: A nuclear attack on academic reputation(Fig. source ³).

https://history.ifeng.com/c/7zDYEZ8PkdU

³https://www.sohu.com/a/293420614_612679

Academic Misconduct

"... any action or attempted action that may result in creating an unfair academic advantage for oneself or an unfair academic advantage or disadvantage for any other member or members of the academic community" ⁴

⁴https://gsi.berkeley.edu/gsi-guide-contents/academic-misconduct-intro/

Academic Misconduct

Basic principles of academic behavior

- Respect intellectual property!
- Proper citations!
- Have your own contribution!
- Respect original source!
- DO NOT seek improper interests

Academic Misconduct

Typical academic misconduct behavior

- Plagiarism, including self-plagiarism
- Tampering the data
 - Using modified or selected data → change the interpretation
 - Tampering with others' academic achievements
- Improper authorship
- **Duplicate submissions**

Improper authorship

- Exclude authors made substantial contributions
- Include authors haven't made substantial contributions
- Include authors without their consent
- Authorship must be authorized
- Author ranking is inconsistent with their contrib.
- Fake info: author's title, organization, educational background, research experience, etc.

Submit the same or slightly different papers

- to multiple journals simultaneously.
- to new journal before withdraw or receiving decision.

Journal extention must be given with

- clear explaintions and citations
- enough new contents

Factors Contribute to Academic Misconduct⁵

- Ineffective Study Habits
- Ineffective Time Management Skills or Overload
- Psychological Factors: e.g. unrealistic expectations of themselves
- Not Knowing the Boundaries
- Never simply copy & past (e.g. sentence, code)

Plagiarism

- "Plagiarism is defined as the use of intellectual material produced by another person without acknowledging its source."
- Why it is important?

Causes of Plagiarism⁷

- Low Confidence in Writing Skills
- Unrealistic Expectations about Writing
- Poor, Careless, or Passive Note-Taking

⁷https://gsi.berkeley.edu/gsi-guide-contents/academic-misconduct-intro/plagiarism/

Causes of Plagiarism⁸

- Citation is Difficult
- Citation is Done During Editing
- Paraphrasing is Just Rewriting
- You Will Get Expelled if You Plagiarize Even Once

How to make reference?

Respect/protect the credit of the original source.

- DO NOT interpret out of context
- Limited to the necessity of argumentation
- As far back as possible to the original author
- References to unpublished work should be authorized
- References to oral presentation should be proofed
- References should be accompanied by obvious signs
- Cite peer-reviewed journal paper if possible
 - Journal > Conference > arXiv

How to make reference?

Proper references

- Missing related references
 - Intend to avoid comparisons
 - Pretend to be innovative
- Avoid fake reference: too many improper citations
 - Citations to unrelated paper of your friends
 - Citations to material that you don't really familiar
 - Self-citations to unrelated paper
 - Indirect reference to prior work

Avoid self-plagiarism

Duplicate or multiple publication

- Reuse similar or duplicate content for a new paper without proper reference.
- Copyright violation
- Make proper citation in journal extension

Example in Tsinghua

- Is an additional Master degree helpful or harmful?
- The change in the rule
- Should be avoid with caution

Not all academic misconducts are intended!

How to recognize plagiarism?

Does the student version borrow ideas from someone else's original source material?								
	No							
Is at least one for-word quote	Not plagiarism:							
Yes Is the direct word-for-word quote missing any of the following: quotation marks full in-text citation that includes a specific locator reference?		No Is the paraphrased idea <i>missing</i>		No word-for-word and no paraphrasing plagiarism is present. Thus, the writing				
Yes Word-for- word plagiarism	No Not word- for-word plagiarism	Yes Paraphrasing plagiarism	No Not paraphrasing plagiarism	must be common knowledge or the writer's own ideas.				

Fig.: Criteria used for Indiana University: https://plagiarism.iu.edu/IUcriteria.html.

Academic misconduct vs. criminal offence

Academic misconduct

- Lifetime punishment
- Self proof

Serious criminal offence

- Severe punishment
- Presumption of innocence

Provide evidence for yourself!

Similar ideas are likely to occur

Q: How to prove yourself?

Good habit to avoid accademic misconduct 9

- Trustable Evidence:
 - Formal records with trusted time stamp.
 - E.g., private GitHub/Overleaf prit.. & emails
- Open source
- Safe co-authors

Good habit: importance of formal records

Example: (Liu et. al. NPAR'17) vs. (Liao et. al. GitHub'17)

- Similar ideas are highly likely to occur.
 - Depth-Preserving Style Transfer, Ruizhi Liao, GitHub, 2017
 Depth-aware Neural Style Transfer, Xiao-Chang Liu *et. al.*, NPAR, 2017.
- Similarity: core idea, equation, pipeline figure, paper structure, use (Chen, et. al., NIPS 2016) for depth estimation.
- Reason: both work follow (Johnson et. al. ECCV'16)
- Proof: Lots of records for email discussion, inter-media results, etc.
- Good habit: private GitHub/Overleaf prjt., and emails.

Keep your mind: what is really important?

- More CVPR papers?
- More citations?
- What problem you have solved?

#papers \rightarrow EI \rightarrow SCI \rightarrow ESI \rightarrow Representive

Assessments will be more reasonable!

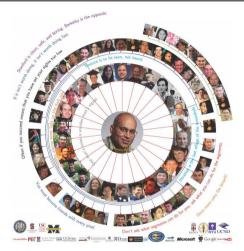


Fig.: J. Malik: "If it is not worth doing, it isn't worth doing fast". 10

 $^{^{10} {\}tt https://people.eecs.berkeley.edu/^malik/student-tree-2010.pdf}$

Copyright

Carefully avoid copyright issues¹¹, using, e.g. Flickr - Creative Commons license.



Fig.: Vectorizing Cartoon Animations, IEEE TVCG 2019

//doresearch.stanford.edu/policies/research-policy-handbook/intellectual-property/copyright-policy

¹¹https:

Case study 1: Piero Anversa 12.

Harvard and the Brigham recommend 31 retractions for cardiac stem cell work

Retraction Watch readers may be familiar with the name Piero Anversa. Until several years ago, Anversa, a scientist at Harvard Medical School and the Brigham and Women's Hospital, was a powerful figure in cardiac stem cell research.





Piero Anversa



IHTMLI Bone marrow cells regenerate infarcted myocardium

..., B Nadal-Ginard, DM Bodine, A Leri, P Anversa - Nature, 2001 - nature.com

Myocardial infarction leads to loss of tissue and impairment of cardiac performance. The remaining myocytes are unable to reconstitute the necrotic tissue, and the post-infarcted heart ...

☆ Save 50 Cite Cited by 7387 Related articles All 17 versions

https://m.huxiu.com/article/267190.html

¹² https://retractionwatch.com/2018/10/14/

Case study 2: Obokata Haruko 13

論文よく読んでいない? 小保方さん博士号にも疑惑



¹³https://dot.asahi.com/aera/2014032600015.html

Case study 3: Hungary's President Pal Schmitt 14

网易首市 > 新闻中心 > 热点新闻 > 正文

匈牙利总统因论文涉嫌抄袭提前下台

2012-04-03 01:36:32 来源: 新华网 举报 ○ 核心提示: 匈牙利总统施密特4月2日宣布辞职, 随后国会投票通过了他的辞职声 明、根据相关法规、新总统必须在30日内中国会选出、施米特生于1942年、曾两 度获得奥运会击剑冠军。1992年获匈牙利体育大学博士学位。目前其博士学位已被 撤销。 7906 6

¹⁴ https://www.163.com/news/article/7U4MG1TB00014JB5.html

Case study 4: Not only text but also images!

Android Malware Detection: Multi Model Collaborative Detection System Based on Credibility

1st Yufan Li College of Cyber Science Nankai University 2nd Yiwen Liu College of Computer science Nankai University 3rd Guoqing Zhao College of Cyber Science Nankai University 4th Kai Cheng College of Cyber Science Nankai University

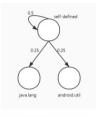


Fig. 1. Markov Chain Example

MAMADROID: Detecting Android Malware by Building Markov Chains of Behavioral Models*

Enrico Mariconti[†], Lucky Onwuzurike[†], Panagiotis Andriotis[‡], Emiliano De Cristofaro[†], Gordon Ross[†], and Gianluca Stringhini[†] [†]University College London [‡]University of the West of England

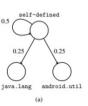


Fig. 5: Markov chains originating fron Section II-C when using packages (a)

Case study 5: not even an author of the paper! 15

国外同行举报CVPR 2020中国论文一稿多投,作者之一华科 还是本届CVPR领域主席



Frank

我们一起学AI. 每天分享AI行业资讯以及学习内容!



1 人特同了该文章

来源: 量子位

Fake news!

两篇论文作者相同、课题相同、结论高度相似..... CVPR 2020主会议开幕在即,本次大会中榜的两位中国学者却被指责"一稿多投">>>>

曹浩楠 发自 凹非寺 量子位 报道 | 公众号 QbitAI

¹⁵ https://zhuanlan.zhihu.com/p/148489400

Case study 6: Co-author could be dangerous! 16



Fig.: Misconduct by any author will significantly influence others, even if you have carefully written your part!

https://www.zhihu.com/question/527620020/answer/2436752217

¹⁶https://arxiv.org/abs/2203.14101

Case study 7: Focus on your own contributions!

```
@GetMapping("/exam/{examCode}")
public ApiResult findByld(@PathVariable("examCode") Integer examCode){
    System.out.println("根据 ID 查找");
    ExamManage res = examManageService.findByld(examCode);
    if(res == null) {
        return ApiResultHandler.buildApiResult(10000,"考试编号不存在",null);
    }
    return ApiResultHandler.buildApiResult(200,"请求成功! ",res);
    (该部分是对试卷进行增删改查操作的功能代码,重复文献,王怀_基于 Java Web 技术的易库在线考试系统的设计与实现,可能会存在代码结构和变量名重复的可能)
```

表 4-8 学生信息表的结构。

列名。	数据类型。	长度。	主键否。	可空否。	功能描述。
Studentid .	Varchar .	200	是。	否→	学生学号。
studentName -	varchar.	200	否。	是↓	学生名字。
Grade ₽	varchar.	10 0	否。	是。	年级。

Fig.: Past source code might increase duplicate rate.

2.2 Spring Boot 技术。

Spring 框架是 Java 平台上一种应用框架, Spring 框架具有面向切面编程 (AOP) 框架, Spring AOP 框架是基于代理模式的,同时运行时可配置,AOP 框架则主要是针对模块之间的交叉关注点进行模块化。基于 Spring 的优秀特性, 设计出了一种 Spring Boot 框架。Spring boot 框架中有两个我们非常实用的策略, 第一个是开箱即用(Outofbox),在开发过程中,通过在 MAVEN 项目的 pom 文件中添加相关依赖包,然后使用对应注解来代替繁琐的 XML 配置文件。(重 复文献是 201600114221 翟志斌 大学本科毕业论文 翟志斌-《大学生》重复原 Fig.: Don not introduce the popular tools in detail!

Specifics of this course

- Required course for all postgraduate students.
- Online study https://plagiarism.iu.edu/
- 《学术规范与论文写作指导》: 16 courses

Every student must submit the test certificate¹⁷!

¹⁷ https://plagiarism.iu.edu/

Specifics: textbook and its author

- Obtained his PhD in 1983 from Cambridge University.
- Visiting professors of Tsinghua, Shandong University, and NUDT
- Authored over 300 papers
- 2014 Friendship Award, China



Fig.: The author: Prof. Ralph R. Martin

Specifics

