Avoiding Plagiarism

Christoph Csallner
University of Texas at Arlington (UTA)

Motivation to avoid plagiarism
Beyond academia

- As an audience member / manager / investor
  - You know something about the topic **before** consuming slides / document
  - You have your own ideas of which sources / research techniques you trust
  - **You want to know which parts of slides / document you can trust**
    - vs. which parts you need to investigate more by yourself
  - You want to know which parts of slides / documents are original work (could become proprietary profit source / patent) vs. from external sources

- You also want to know where you can quickly find more info on certain parts of document / slides

Within academia (including UTA)

- Treat plagiarism (& other forms of academic cheating) **very** seriously
- UTA asks instructors to report **every** suspected case of plagiarism, cheating, ..
- UTA has a central office that investigates such reports
  - Asks student if they agree with such a report
  - Office makes its own decision if the report is true
  - Only allows instructor to penalize student (reduce points, etc.) after UTA office determined outcome of such a report

How to avoid plagiarism?
Proper quoting & citing

- [+] Solves both use-cases
  - Avoids plagiarism in academia
  - **Also provides above benefits in commercial settings**

- [+] Can apply same quoting & citing style in both settings
  - Do not have to forget quoting/citing & re-learn after graduating
  - **Many commercial documents (e.g., IPO filings) use same quoting & citing style as many academic documents**
    - The more important (more money involved) the more strictly they will use quoting/citing
    - Examples: Legal filings, public companies' quarterly earning slides

Live demo: Let’s say you have found a sentence on Wikipedia you want to include in your document

- Applies to slides
- Applies to written deliverables
  - Specification
  - Design
  - …

Common among styles: Quote -- Wrap copied text in commonly-used quotation markers

- Wrap copied text in one of following quotation markers
  - “MyCopiedText”
  - ‘MyCopiedText’
  - >>MyCopiedText<<
- Examples:
  - “Network nodes can validate transactions, add them to their copy of the ledger, and then broadcast these ledger additions to other nodes.”
  - ‘Network nodes can validate transactions, add them to their copy of the ledger, and then broadcast these ledger additions to other nodes.’
  - >>Network nodes can validate transactions, add them to their copy of the ledger, and then broadcast these ledger additions to other nodes.<<

Style 1: Quote & Source inline

- Put source information inline into the text, i.e.,
  Right after the quoted text

- Example:
  - “Network nodes can validate transactions, add them to their copy of the ledger, and then broadcast these ledger additions to other nodes.”
    -- https://en.wikipedia.org/wiki/Bitcoin, accessed 1/20/22

Style 2: Quote & Pointer to a source (References at end)

- Add pointer right after quoted text

- Example:
  - “Network nodes can validate transactions, add them to their copy of the ledger, and then broadcast these ledger additions to other nodes.” [1]

- Then have the source information on a separate “References” slide / section at end of document

Style 3: Quote & Pointer to a source (Footnote)

- Add pointer right after quoted text (formatted as superscript)

- Example:
  - “Network nodes can validate transactions, add them to their copy of the ledger, and then broadcast these ledger additions to other nodes.”[1]

- Then have source information in a footnote on same slide / page

[1] https://en.wikipedia.org/wiki/Bitcoin, accessed 1/20/22

Each style has several variations

- How pointers are formatted: [1] vs [AuthorNameYear] vs (1) vs …
- How the source information is listed
  - AuthorFirstName AuthorLastName, …
  - AuthorFirstInitial AuthorLastName, …
- Etc.

- Just pick one style that has enough information for others to locate the source & use that style consistently throughout the document
  - For websites, add date when you accessed the website

References: ***Not okay***

- https://en.wikipedia.org/wiki/Bitcoin, accessed 1/20/22
- Article title 1, article author 1, year published
- Book title 1, book author 1, year publi
- www.website2.com, accessed 1/19/23
- Article title 2, article author 2, year pu

Entire presentation / document could be copy-paste from listed sources

No pointer targets (& often no pointers in document / slides). So not clear which part of your document / slides refers to which of these listed sources

References: ***Not okay*** – Creates Confusion

- https://en.wikipedia.org/wiki/Bitcoin, accessed 1/20/22
- Article title 1, article author 1, year published
- Book title 1, book author 1, year published
- www.website2.com, accessed 1/19/23
- Article title 2, article author 2, year published

Not plagiarism, but for class deliverable still not good for grade

Entire presentation / document could be copy-paste from listed sources

Do you want your audience / instructor to manually search all listed sources for all your presentation / document contents?

References

- [1] https://en.wikipedia.org/wiki/Bitcoin, accessed 1/20/22
- [2] Article title 1, article author 1, year published
- [3] Book title 1, book author 1, year published
- [4] www.website2.com, accessed 1/19/23
- [5] Article title 2, article author 2, year published

Pointer targets (here: [1], [2], …) allows rest of document to refer to a specific source listed here

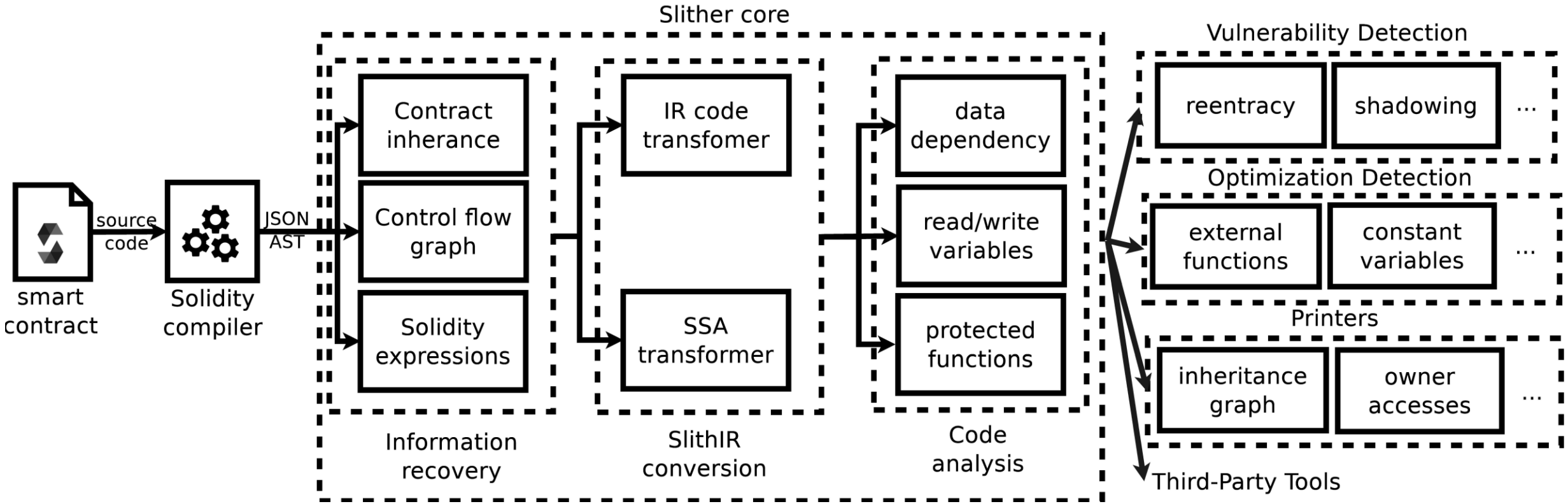
What about figures / tables / ideas?

2 of the earlier 3 options

- Main difference: Cannot quote, since we do not copy-paste text

- Otherwise same
  - Style 1: Source inline (right next to figure / table / idea)
  - Style 2: Pointer to a source (References at end)

Style 1 (Source inline): Figure example



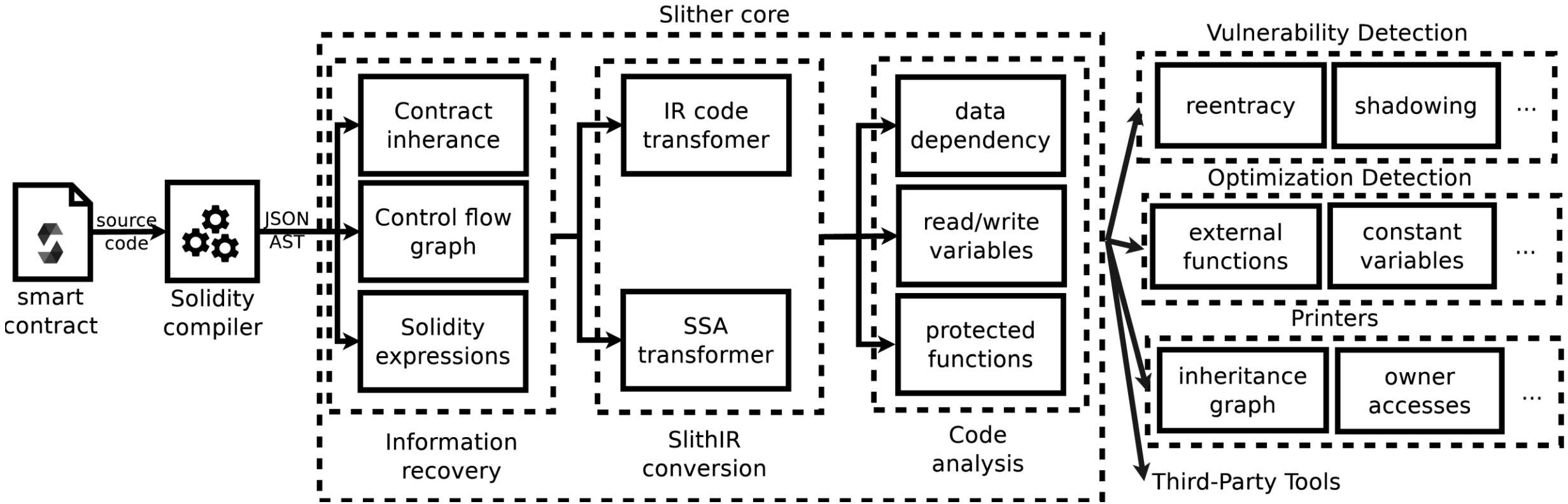
[https://arxiv.org/abs/1908.09878, accessed 1/19/23]

Style 1 (Source inline): Table example

		Slither	Securify	SmartCheck	Solhint
Accuracy	False positives	10.9%	25%	73.6%	91.3%
	Flagged contracts	112	8	793	81
	Detections per contract	3.17	2.12	10.22	2.16
Performance	Average execution time	0.79 ± 1	41.4 ± 46.3	10.9 ± 7.14	0.95 ± 0.35
	Timed out analyses	0%	20.4%	4%	0%
Robustness	Failed analyses	0.1%	11.2%	10.22%	1.2%
Reentrancy examples	DAO	✓	✗	✓	✗
	Spankchain	✓	✗	✗	✗

[https://arxiv.org/abs/1908.09878, accessed 1/19/23]

Style 2 (Pointer to a source): Figure example



[Slither]

Style 2 (Pointer to a source): Table example

		Slither	Securify	SmartCheck	Solhint
Accuracy	False positives	10.9%	25%	73.6%	91.3%
	Flagged contracts	112	8	793	81
	Detections per contract	3.17	2.12	10.22	2.16
Performance	Average execution time	0.79 ± 1	41.4 ± 46.3	10.9 ± 7.14	0.95 ± 0.35
	Timed out analyses	0%	20.4%	4%	0%
Robustness	Failed analyses	0.1%	11.2%	10.22%	1.2%
Reentrancy examples	DAO	✓	✗	✓	✗
	Spankchain	✓	✗	✗	✗

[Slither]

What about code / class project?

Industry best practice: Build on existing code

- ***Not okay:***
  - Copy code from 3rd party, hide source of code, pretend you created it
- ***Instead:***
  - Describe how you built on 3rd party code
    - You likely will import / use / call existing libraries / APIs
    - You may download code & fix a bug in it
    - You may download code & add a (small) feature
  - Make source and authorship or 3rd party code clear
- Remember: We do not expect you to create a big tool from scratch
  - Would be completely unrealistic, especially for a project when you take several other classes

References

- [Slither] https://arxiv.org/abs/1908.09878, accessed 1/19/23