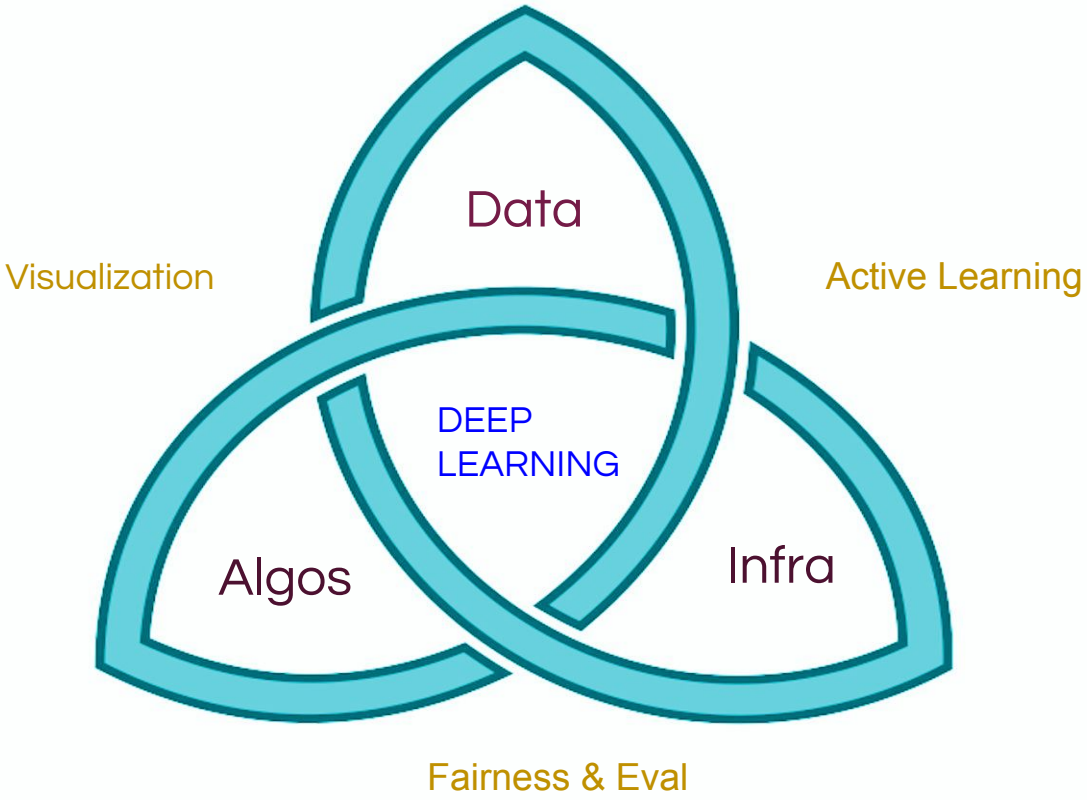
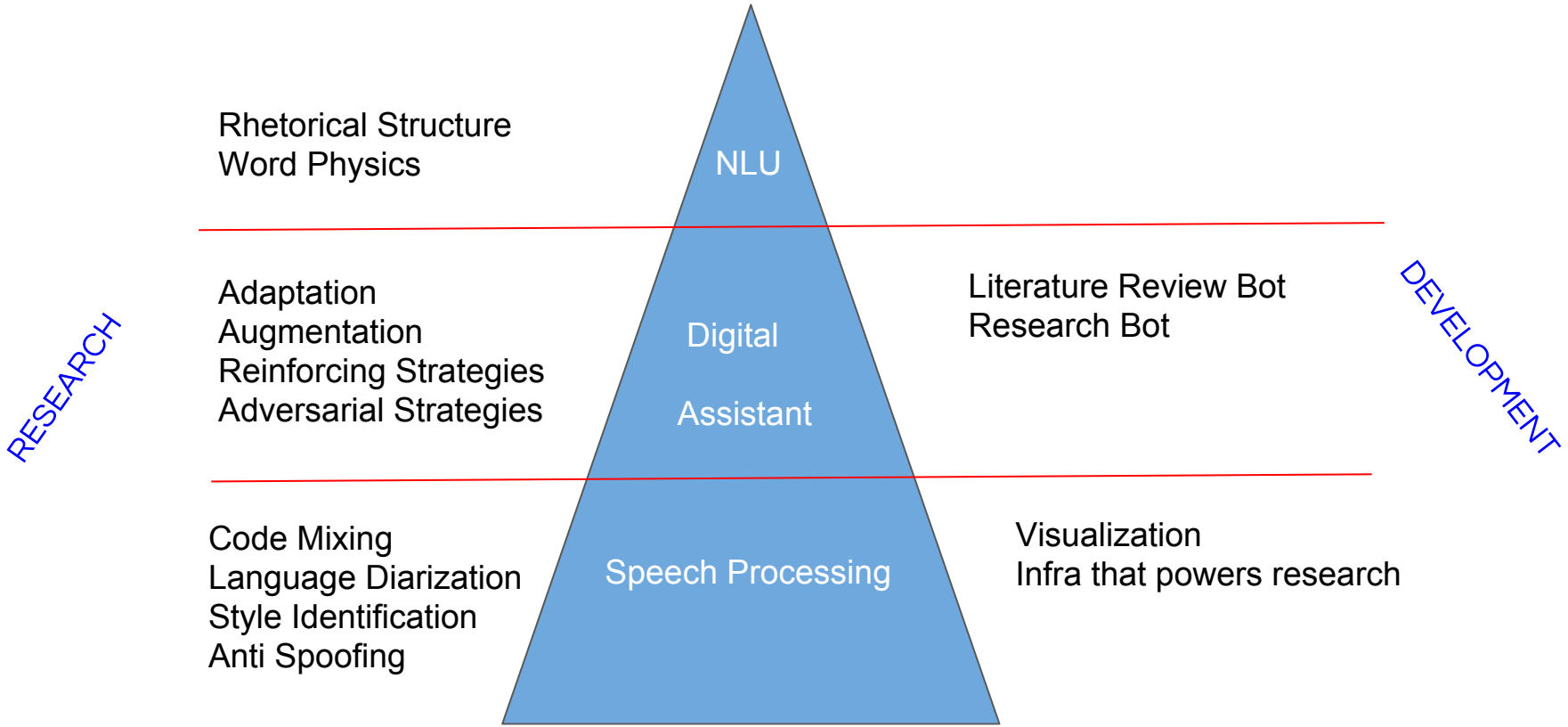
Sporadically updated list of prospective projects

Progress in deep learning depends on the trinity of data, infrastructure and algorithms



Might be beneficial to group the tasks into a hierarchy



I think a good way to get upto speed in deep learning for beginners is by doing challenges. After a couple of years, learning stops and statis develops coz one keeps innovating in the context of short term. Then a good way to level up is by leading a submission (as opposed to building it from scratch). This also imparts managerial skills and promotes long term thinking.

Speech Processing - Research

- Code Switching / Code Mixing
  http://www.cs.cmu.edu/~srallaba/ProjectPhDMastery/pdfs/overview_projects_may2018.pdf
- Language and Style Diarization
  http://www.cs.cmu.edu/~srallaba/pdfs/automatic-detection-code.pdf

- ANTI SPOOFING

http://www.asvspoof.org http://www.mce2018.org/

- INTENT RECOGNITION

http://www.cs.cmu.edu/~srallaba/COMPARE2018/index.html

Speech Processing - Development

- Visualization Tools

https://github.com/yosinski/deep-visualization-toolbox

- Infra for Literature Review

https://groups.google.com/forum/#!forum/learning-enthusiasts

Conversational Agents - Research

- Data Augmentation

  http://www.cs.cmu.edu/~srallaba/pdfs/11-785-asr.pdf

- Domain Adaptation

  http://convai.io/

Conversational Agents - Development

- Literature Review Bots

  https://bot.dialogflow.com/5f0136a9-62de-472c-8445-e2b0e639b3e6