**The Quest to Automate Fact-checking**

**Politicians make false and misleading claims**
- National security threats
  - Russian government interference with the 2016 election. False news floods social media (“filter bubbles” and “echo chambers”).
  - Facebook trending topic algorithms promoted fake news during the final ten days of the 2016 election. Fake news floods social media (“filter bubbles” and “echo chambers”).
  - Russian government interference with the 2016 election. False news floods social media (“filter bubbles” and “echo chambers”).
- Lack of automated tools that assist fact-checkers
  - “The Holy Grail”: fully automated fact-checkers

**Combating falsehoods**
- Coder quality
- Feature extraction and selection
- Feature importance
- Classification and ranking by check-worthiness
- Classification and Ranking Accuracy

**Data Labeling and Ground-Truth Collection**

**End-to-End Fact-Checking**

**Case Study: 2016 U.S. Presidential Election Debates**

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**Feature Extraction and Selection**

- Feature importance
- Classification and ranking by check-worthiness
- Classification and Ranking Accuracy

**Comparative Analysis of CNN and Politifact Fact-checked Sentences**

**End-to-End Fact-Checking**

**ClaimBuster: The First-ever End-to-End Fact-Checking System**

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**Conclusion**

- The quest to automate fact-checking.
- Needs for automated tools.
- Lack of automated tools.
- The Holy Grail: fully automated fact-checkers.

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