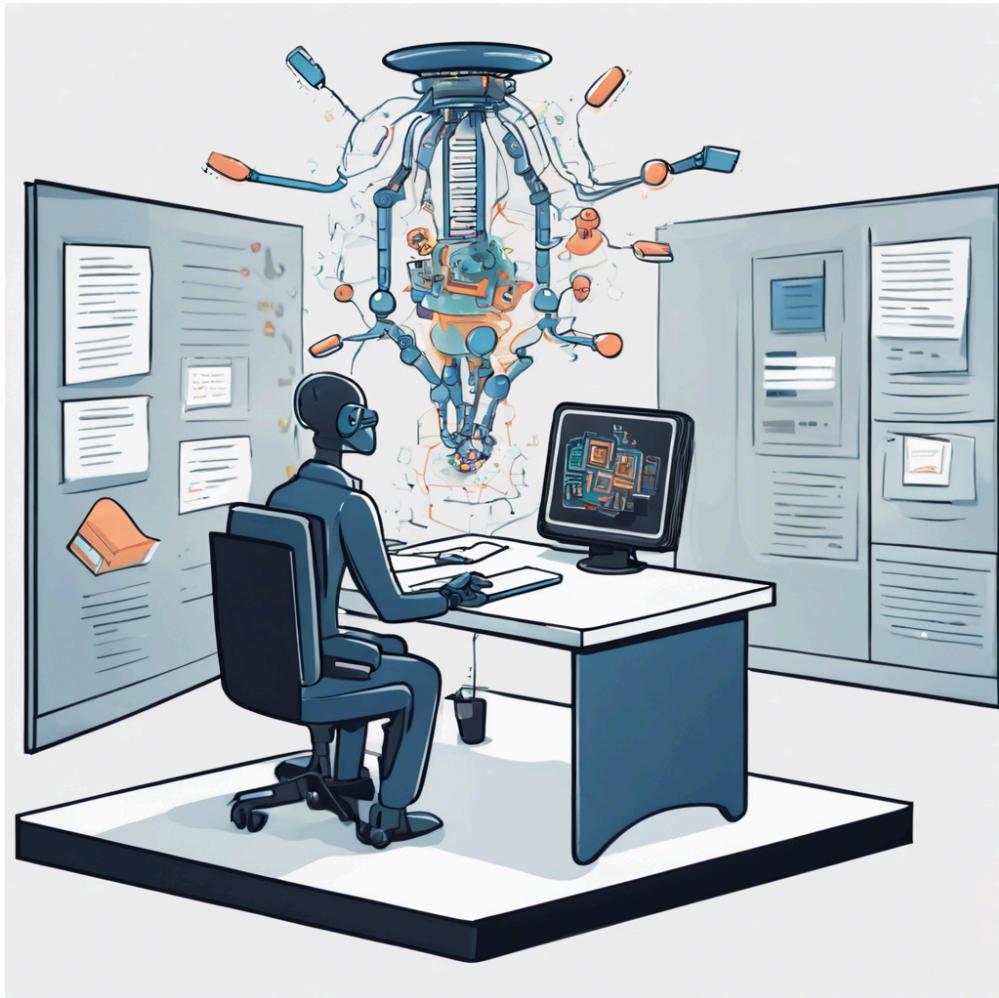


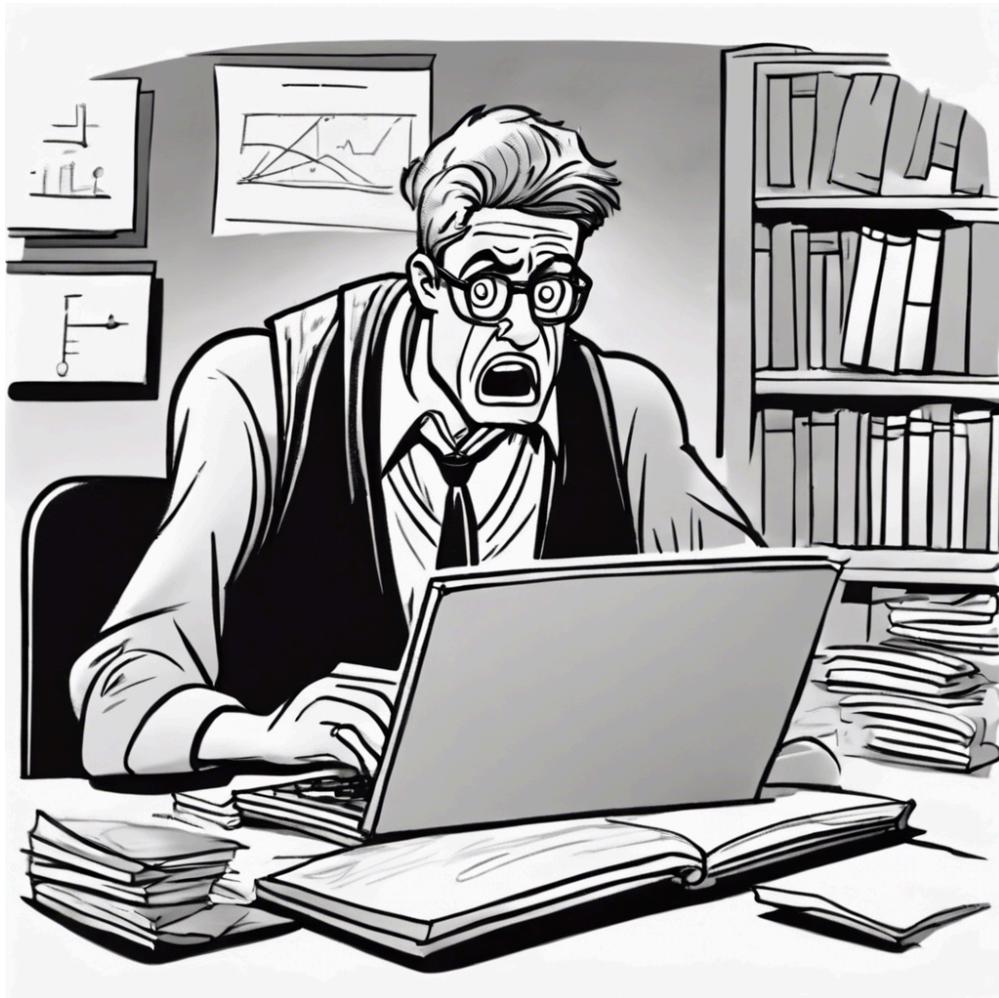
# Slidify.ai: Leveraging AI for Sophisticated Presentation Drafts

# Background



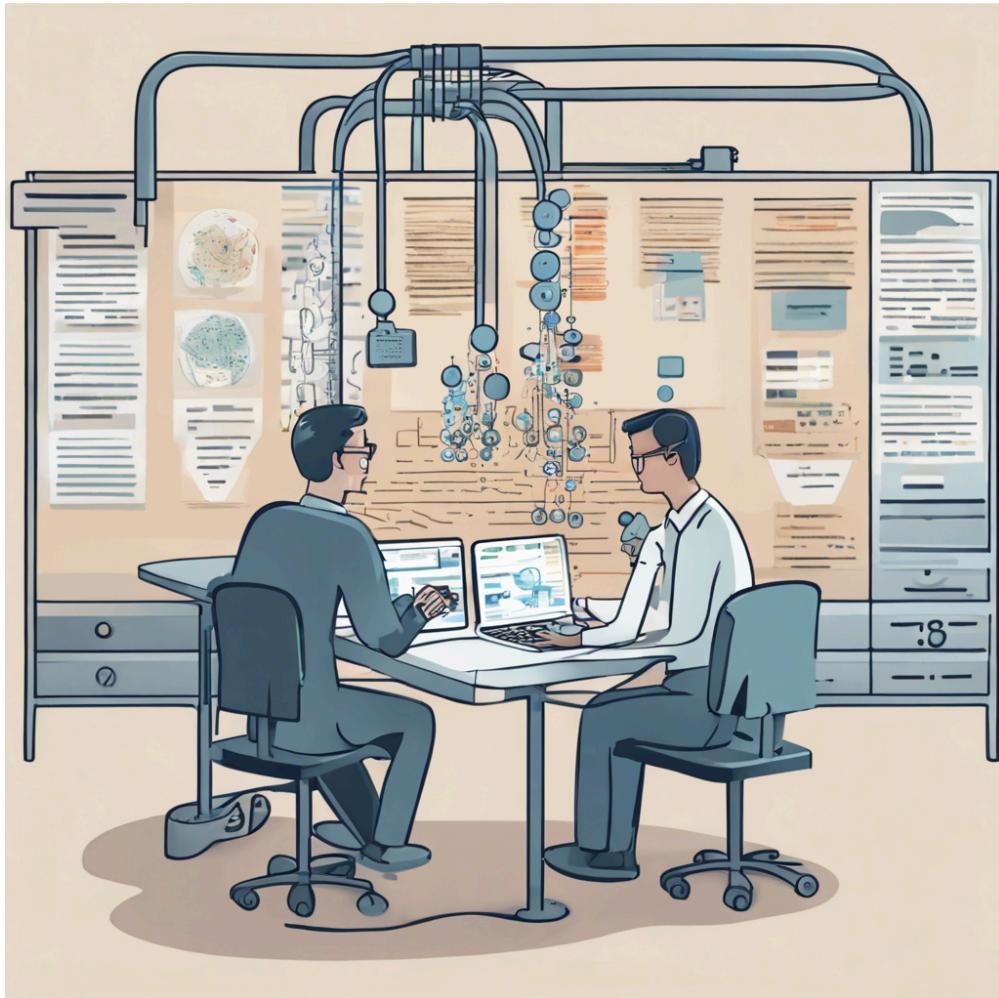
- Slidify.ai: Converts research papers to presentation drafts using AI.
- Utilizes Large Language Models to extract key information from papers.
- Incorporates generative AI for visually appealing presentation slides.
- Offers user customization options for slide count and templates.

# Introduction - Part 1



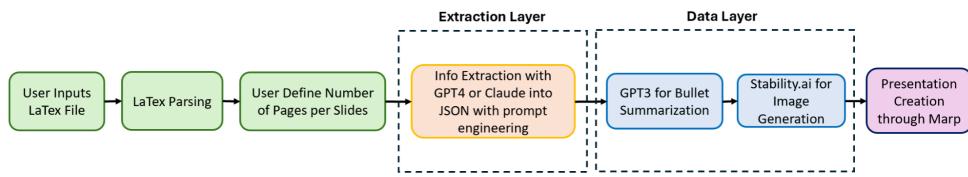
- Existing solutions lack efficiency in converting research papers to presentations.
- Slidify.ai offers a superior way to convert LaTeX documents to presentations.
- Users can easily upload documents and utilize AI for conversion.
- Overcomes shortcomings of big tech company solutions for presentation conversion.

# Introduction - Part 2



- Extracts tables, figures, key info for tailored, user-centric presentations.
- Focuses on specific content users need for effective presentations.
- Customized approach enhances presentation quality and user satisfaction.
- Shifts from generic slides to personalized, data-driven presentation content.

# Methodology



- LaTeX parsing and info extraction
- Extraction layer for key data extraction
- Data layer generates bullet points and images
- Marp library used for presentation creation

# Technical Stack Summary

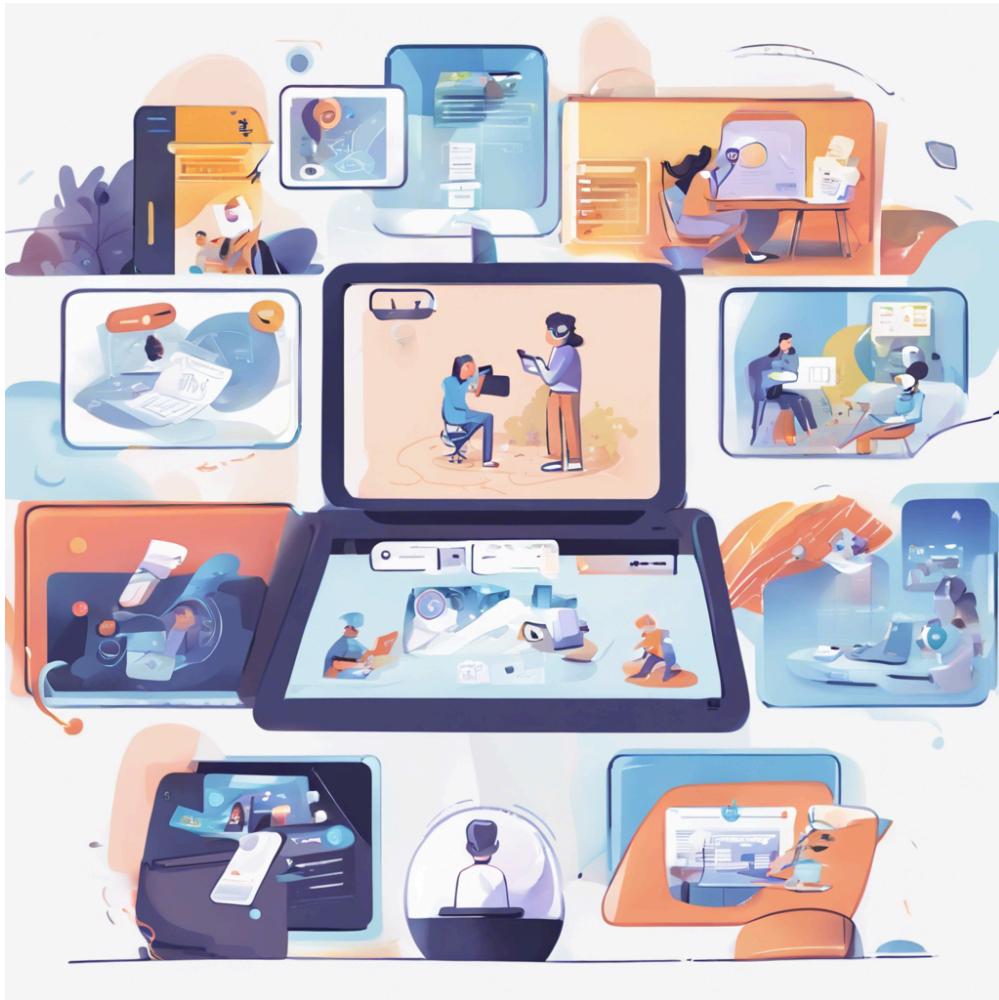


- Front-end: Streamlit, Back-end: Python with PyLaTeX, Deployment: Docker
- Hosted on Google Cloud, Integration with Stability.ai's image API
- Streamlit for user interface, Python for backend functionality
- Docker deployment, Google Cloud hosting, Stability.ai API integration

# Results

- Engineered prompts for LLM to extract information as JSON output.
- Regex lacks generalizable pattern; our model captures semantic nuances.
- Model identifies nuances like figures in different sections accurately.
- Significant achievement in extracting and representing information from papers.

# Future Work



- Expand Slidify.ai to include normal documents, essays, finance reports.
  - Enhance with image generation for slide backgrounds and themes.
  - Innovate 'Research Paper to Educational Shorts Video AI' concept.
  - Utilize speech-to-text AI to convert speaker notes into videos.

# Conclusion



- Slidify.ai: Converts academic papers to persuasive presentation slides using NLP.
- Addresses challenges for researchers and students in disseminating academic work.
- Automates slide creation process, empowering users to focus on research.
- Enables effective sharing of findings with a broader audience.

# Acknowledgment



- Thank you Stability.ai for supporting us
- Appreciation for providing image generation API
- Grateful for Stability.ai's valuable support and API provision
- Acknowledging Stability.ai for their support and image generation API

**Thank You!**