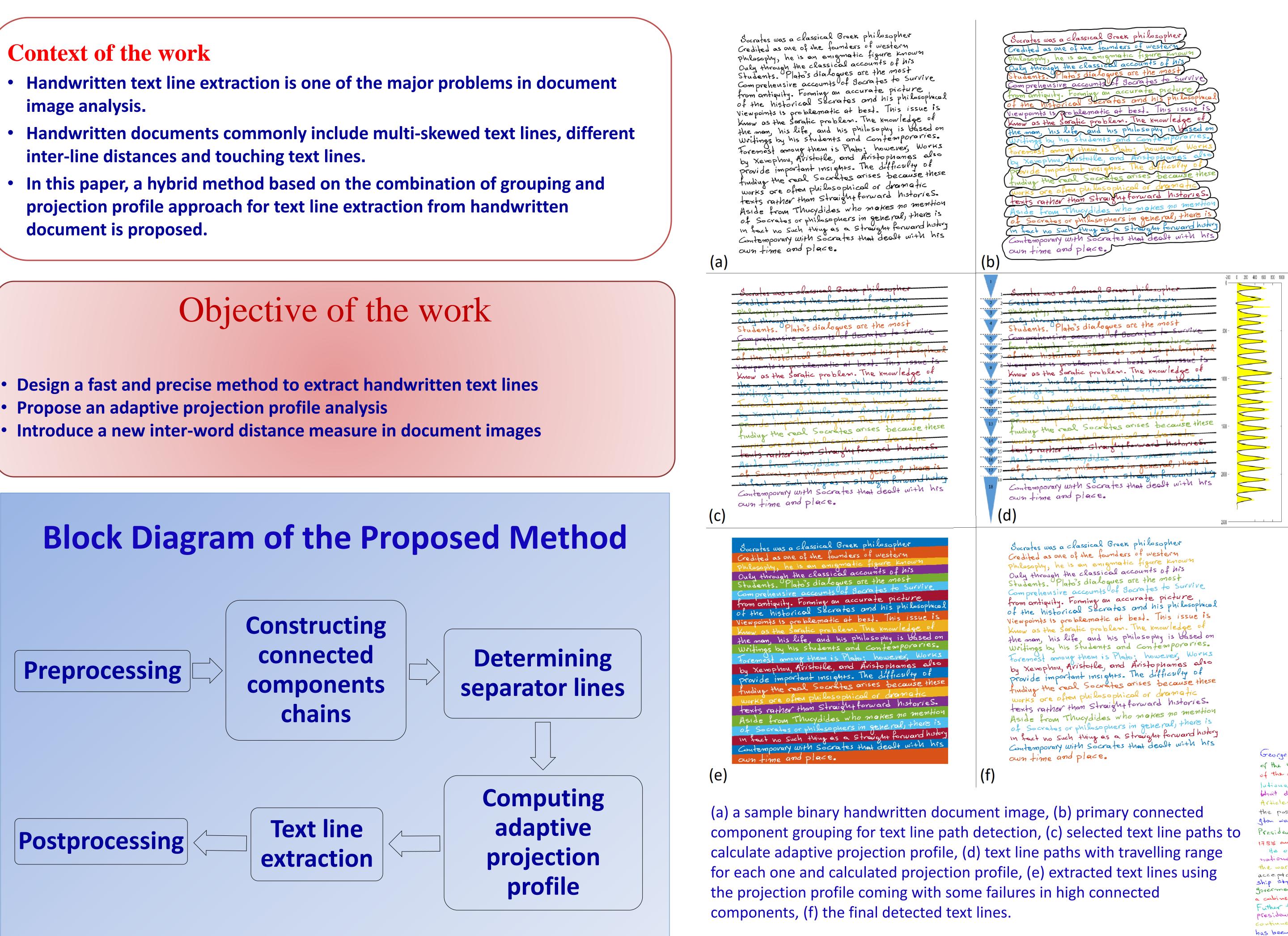
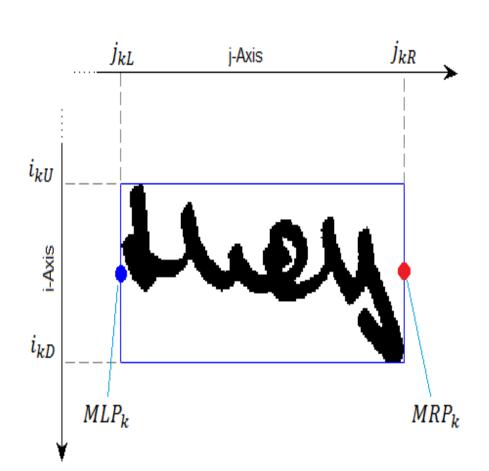


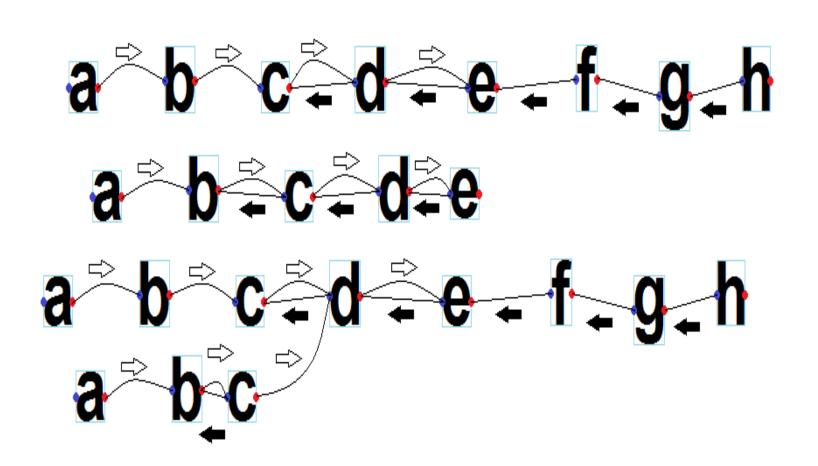


- image analysis.
- inter-line distances and touching text lines.
- document is proposed.

- **Propose an adaptive projection profile analysis**







A CC sample and its MRP k and MLP k points.

CCs and their determined bounding box, the most right and left points and the route of each text line.

# A Hybrid Method for Text Line Extraction in Handwritten Document Images

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### Comparison of the results obtained from the proposed method with some of the results reported in [13]

Metric	M	<i>o2o</i>	DR (%)	RA (%)	FM (%)
MSHK	2696	2428	91.66	90.06	90.85
QATAR-a	2626	2404	90.75	91.55	91.15
CVC	2715	2418	91.28	89.06	90.16
NCSR (SoA)	2646	2447	92.37	92.48	92.43
ILSP (SoA)	2685	2546	96.11	94.82	95.46
<b>Proposed Method</b>	2652	2553	96.37	96.26	96.32

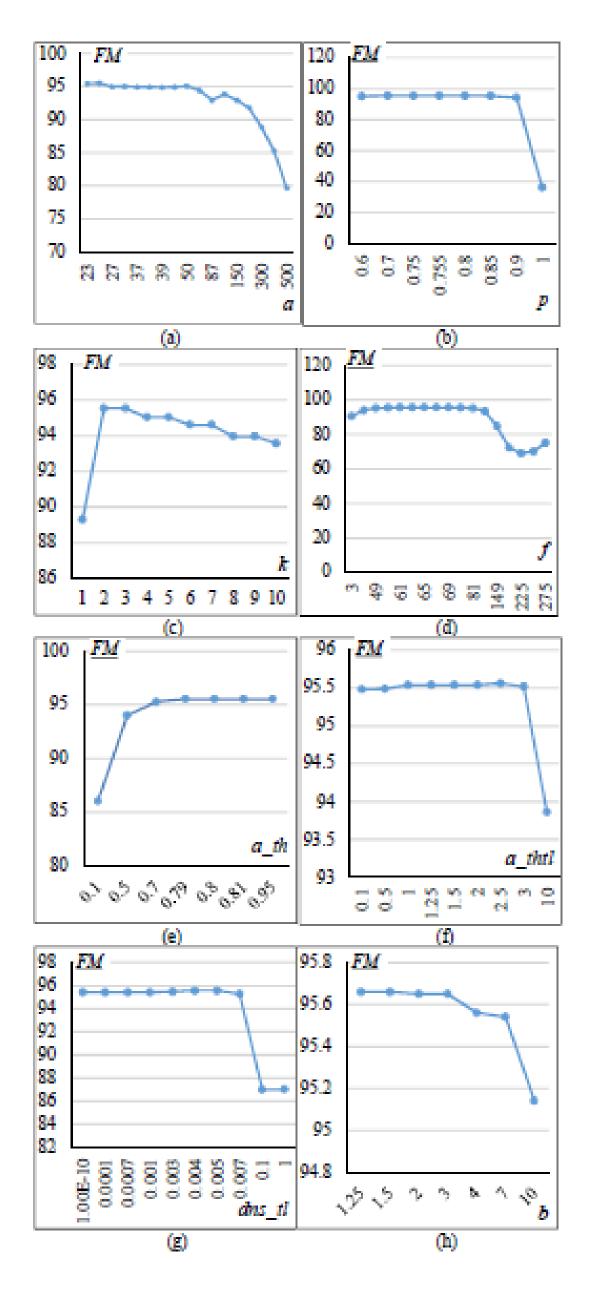


George Washington was one of the Founding Fathers of the United States serving as the commander in chief of the Continental Army during the American Rovalutionary war. He also presided over the convention that drafted the constitution which replaced the of confederation. The Constitution established the position of President of the republic, which washington was the first to hold. Washington was elected President as the unanimous choice of the 69 electors in

1788 and he served two terms in office He oversaw the creation of a strong well financed national government that maintained neutrality in national government that maintained neuriality is the wars raging in Europe suppressed rebellion and won acceptance among Americans of all type. His leader -acceptance among Americans of all type. His leader -ship style established many forms and rituals of government that have been used since such as using government that have been used since such as using a cabinet system and delivering an inaugural address. Futher the peaceful transition from his presidency to the Futher the peaceful transition from his presidency to the presidency of John Adams established a tradition that continues into the sist century. Historically Washington has been widely regarded as the father of his country.

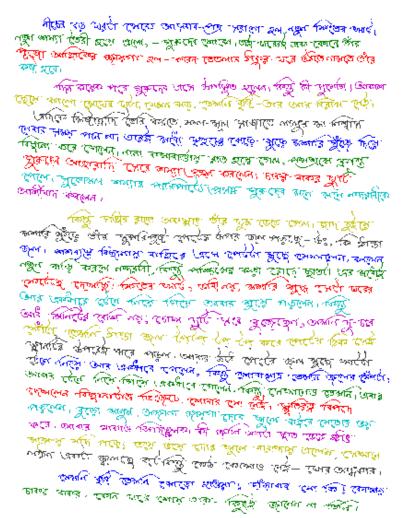
## **Conclusions and Future work**

- presented
- Introducing a new distance measure for CC grouping
- Presenting an adaptive projection profile
- Achieving a comparable performance with a low computation
- small and large) to the text line that they actually belong.





### Text line segmentation results (FM) obtained from the experiments on the train dataset based on different values for the parameters.



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Sample results of the tested document images written in (a) English, (b) Bangla, and (c) Greek.

• In this paper, a new method for text line extraction in handwritten document images is

• In future, we plan to investigate on designing a way to achieve more precise separator lines proposing a more efficient method to assign unusual connected components (very