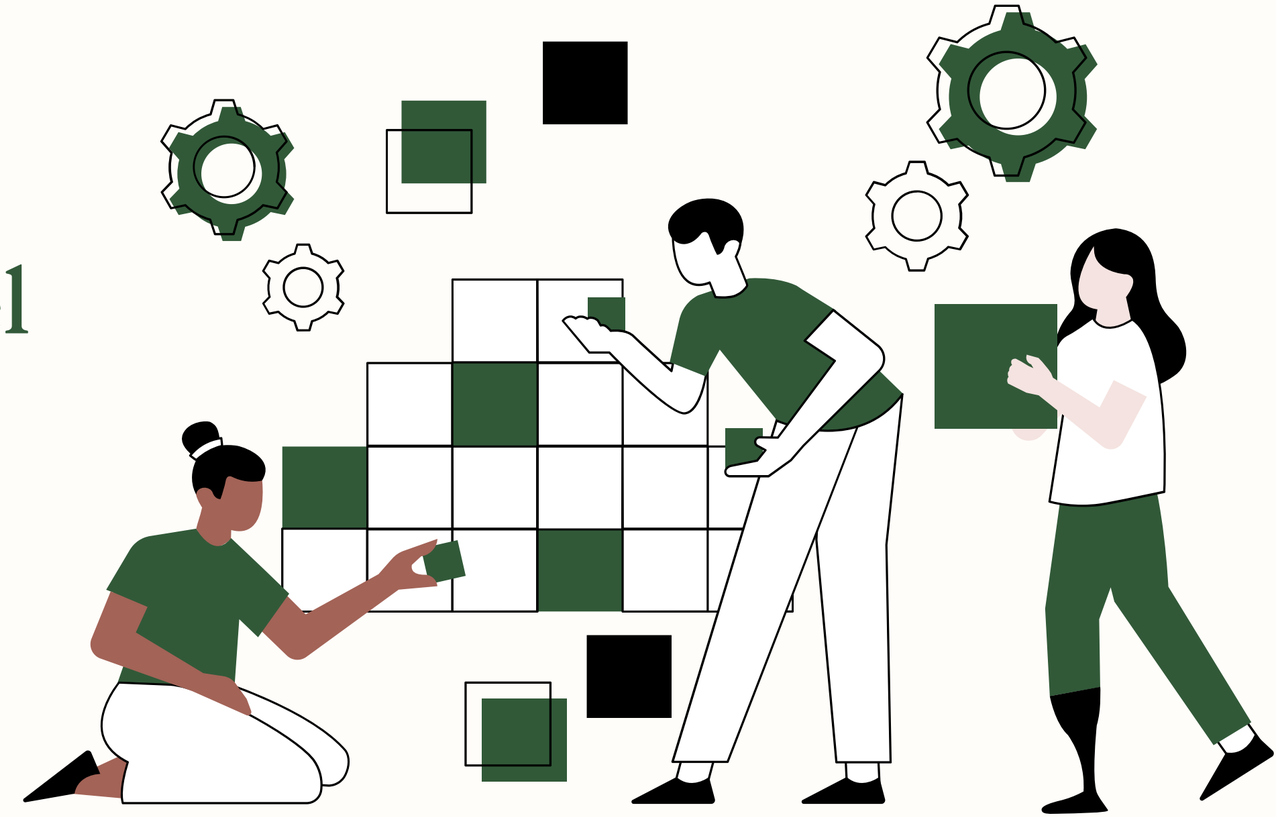
CSE 445

Project : A segmentation model that segment accurately exact the nuclei from WSIs.



November 26, 2024

Agenda

- Timeline
- Milestones
- Testimonials
- Results
- Conclusion

Timeline

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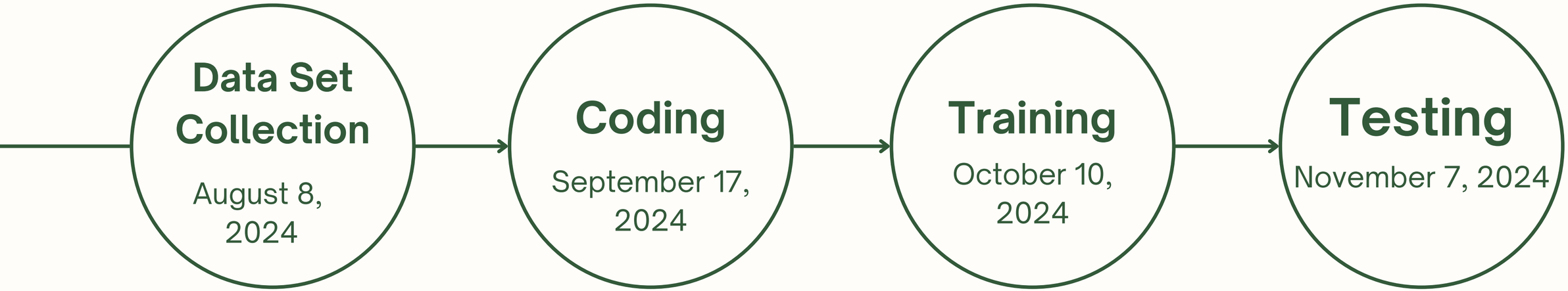
Project Timeline



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Project Milestones

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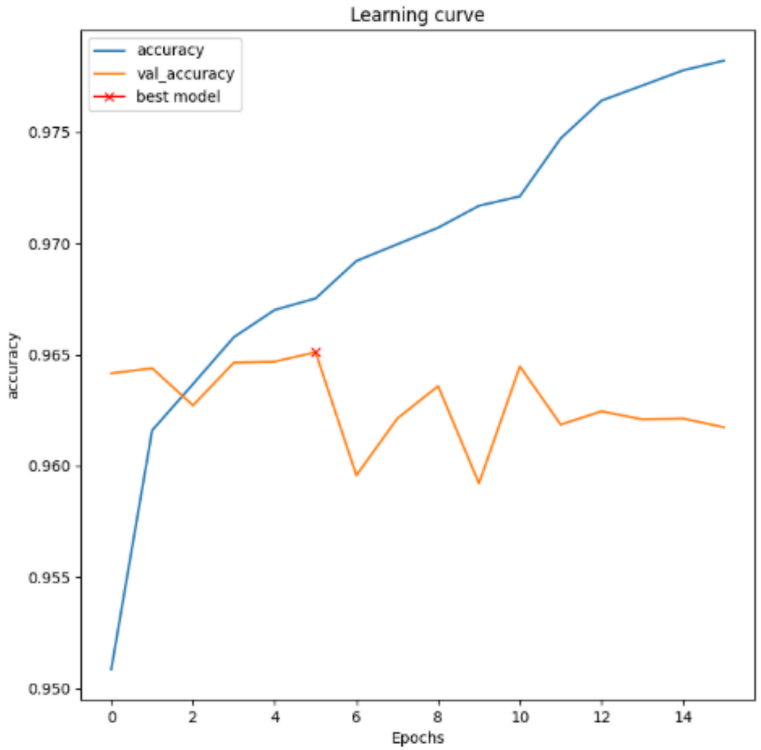
Project Milestones

Nuclei Segmentation



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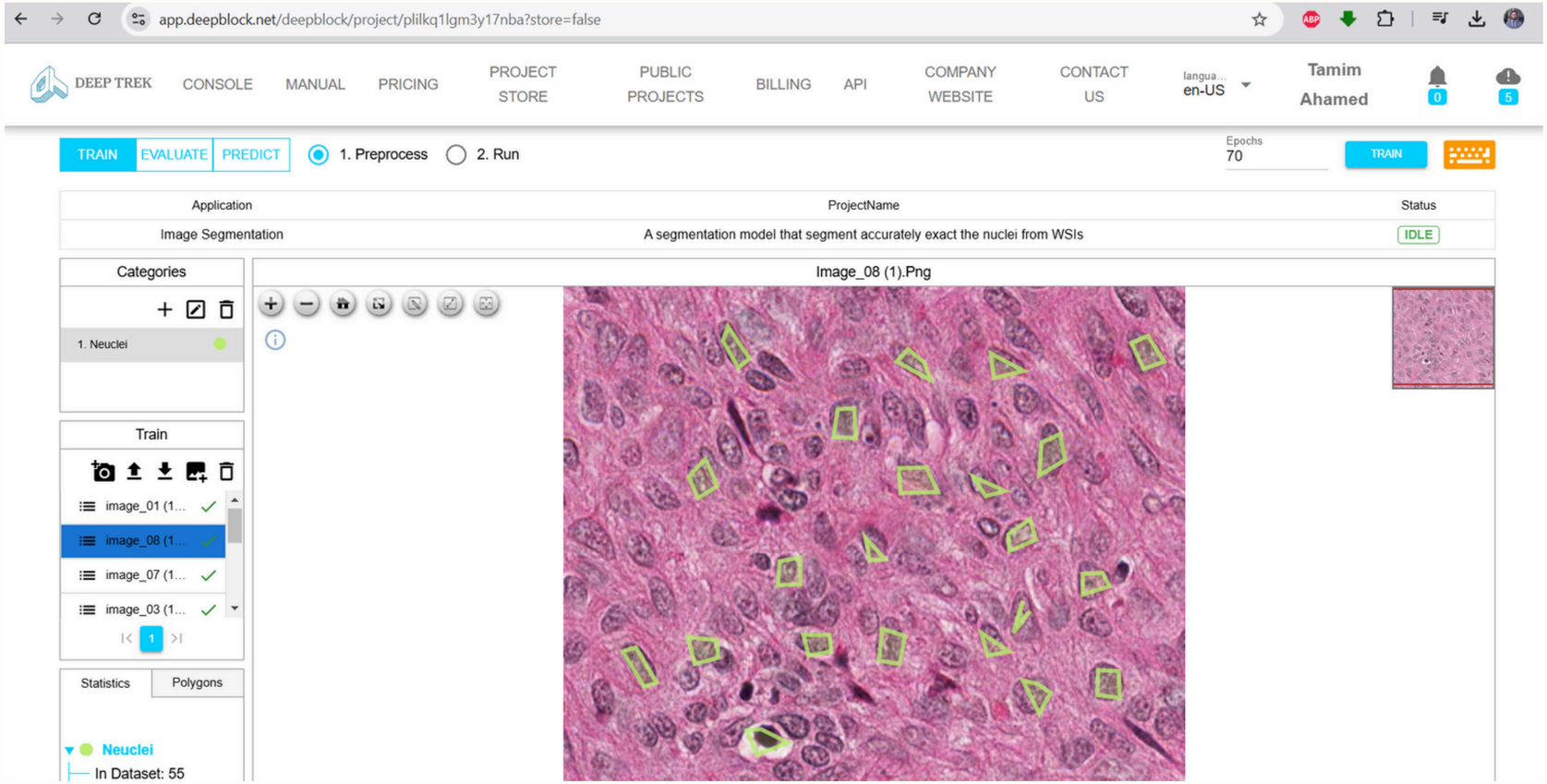
Making Annotated Data for Training



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Results

This project developed a U-Net-based model for segmenting cell nuclei from whole slide images (WSIs) with heterogeneous backgrounds. The model achieved high segmentation accuracy, demonstrated by metrics like Intersection over Union (IoU) and Dice Coefficient, despite challenges with varying textures, lighting, and staining. It proved effective and adaptable, making it suitable for biomedical research and diagnostics. Future work can focus on expanding the dataset and exploring advanced architectures to improve accuracy and generalization.

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Thank you!