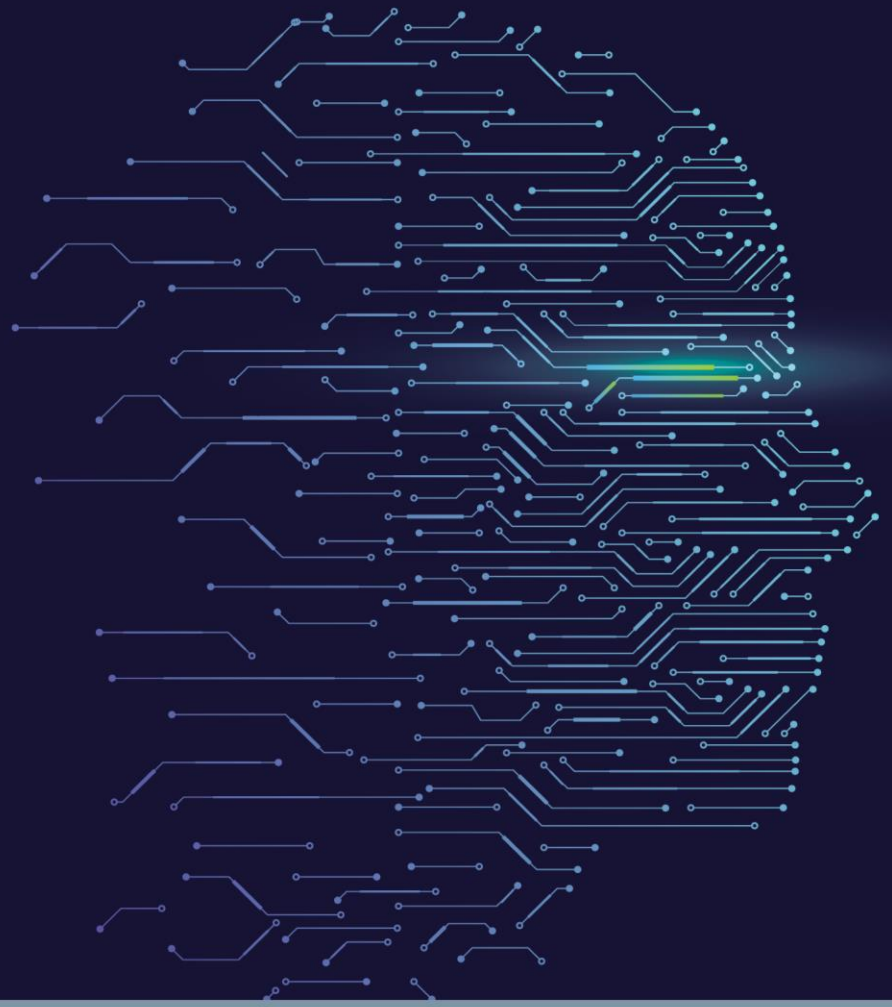
2019 IMAGING INFORMATICS SUMMIT



Current State of AI in Practice: Implementation Perspective

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Disclosures

- FlowSigma, Inc., Co-founder, ownership interest, inventor of IP licensed by Mayo Clinic to FlowSIGMA and consultant.

Learning Objectives

- Questions to ask when translating AI algorithms into clinical practice:
  - Why would I want to develop my own algorithm?
  - What does the process look like?
  - Who needs to make it happen?
  - Where does AI fit into my practice?
  - When is an algorithm ready?
  - How do I get started?

Why would I want to develop my own algorithm?

- Leverage in-house expertise and imaging archive
- Adapt directly to my practice and workflow

What does the process look like?

- Frankly, it can be a bit of a mess
- Prioritize algorithms, and work on implementing 2-3 at a time
- Plan early, but be adaptable

Who needs to make it happen?

- Requires a large team
- Usually, **NOT** the researcher who developed the algorithm!
- For us:
  - Physician Leadership with enthusiastic support
  - AI Experts with **clinical** Radiology background
  - IT
  - EMR developers
  - Compliance and regulatory advisors and consultants
  - Education and communication teams

Where does AI fit into my practice?

- AI can be
  - just another 3rd party app…
  - Or deeply integration in clinical workflow
- We have opted for deep integration
- Optimize the impact of AI by asking…
  - Why would a radiologist use it?
  - Why would a radiologist **not** use it?

When is an algorithm ready?

- For researchers, when the paper is published
- For radiologists, when seamlessly integrated and easy to use
- For clinicians, when a patient's needs are better addressed

How do I get started?

- Start with supportive and visionary Radiology leadership
- Add AI Experts dedicated to bringing algorithms into clinical practice
- Form the right supporting teams
- Plan for the long term
- Make it happen!