FAIR Activities and Updates

Mike Hildreth
Large Uptick in FAIR activities in the US

• Since Feb 2019: MPS FAIR Hackathon...
  – (One of the earliest FAIR workshops in the US)
  – CENDI-NFAIS-NAS-RDA Workshop on FAIR Data (Sept. 2019)
  – USGS CDI Project: Making Data FAIR in the USGS (Sept. 2019)
    • https://my.usgs.gov/confluence/display/cdi/Making+USGS+Data+FAIR+Workshop
  – NIH: Workshops supporting FAIR principles:
    • http://datascience.nih.gov/data-ecosystem/workshops
  – NIST: e.g., Additive Manufacturing (Oct. 2020)
    • https://www.asminternational.org/web/nist-asmdatamanagementworkshop
  – NSF and DOE?
US GOFAIR

• Website live in July 2020: https://gofair.us/
• Already this year have hosted
  – Workshop: Advancing FAIR and GO FAIR in the U.S. (Feb 2020)
  – Webinar series
  – Train-the-trainer events
  – Implementation Networks creeping into US
    • https://www.go-fair.org/implementation-networks/overview/
Tools

• FAIR tools being developed (examples)
  – Mostly for verifying FAIR-ness at this point (Lowest-hanging fruit)
  – Data Stewardship Wizard - allows use of different knowledge models to make choices about FAIRification
    • https://ds-wizard.org/
  – FAIR Evaluator:
    • https://fairsharing.github.io/FAIR-Evaluator-FrontEnd/#/!
  – PresQT Evaluator: FAIRShare Evaluator Service
  – Actual FAIRification tool for nano safety data: NMDataParser tool
    • https://pubmed-ncbi-nlm-nih-gov.proxy.library.nd.edu/32987901/
FAIR and Machine Learning

• A crucial ingredient in Machine Learning is labelled, understandable datasets ⇒ FAIR!
  – Explosion of needs and uses of ML/AI will require huge diversity of large datasets
  – Recognition that tools are needed to enable easier dataset preparation
  – Actual economic incentive to drive FAIR adoption and the development of FAIR tools

• GO BUILD!