DataCrunch Lab

Transforming operations with
Analytics • AI • Automation

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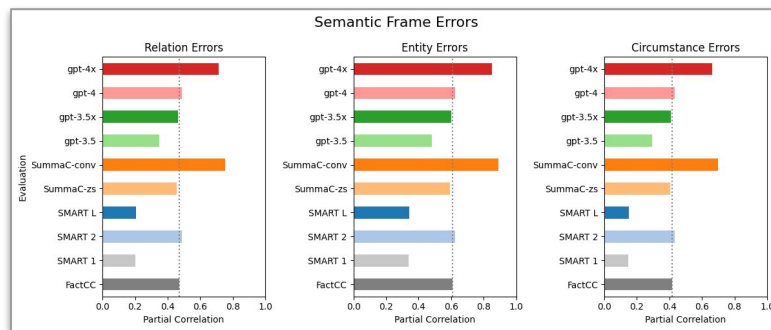www.linkedin.com/company/datacrunchlab

TLDR: Like the President's Daily Brief, But for Everyone

Summarize → Verify → Edit → Deliver

Evaluated various methods to determine factual consistency of summaries

- **Factual consistency errors are more than hallucinations**

- **Gold standard: human evaluation**

- **Metrics are not capturing all errors**
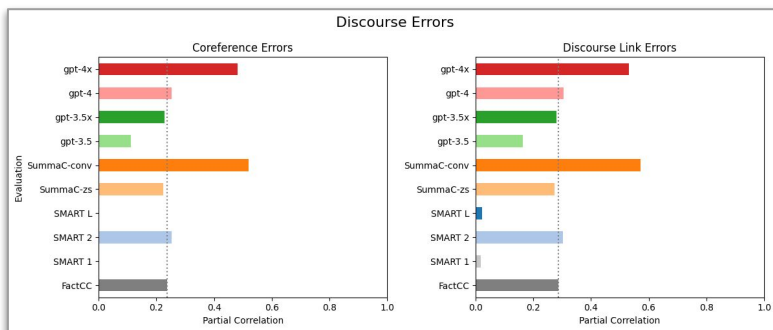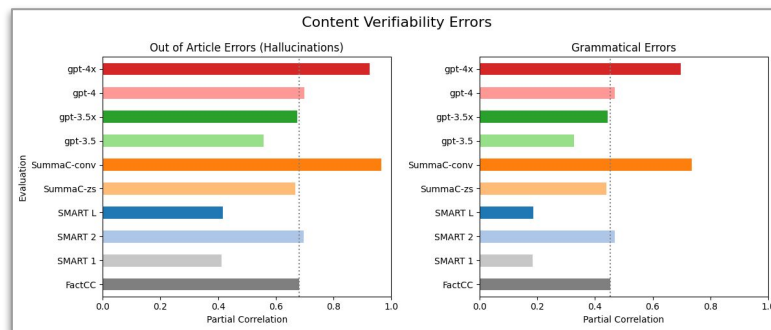
Improved detection with ensemble of metrics

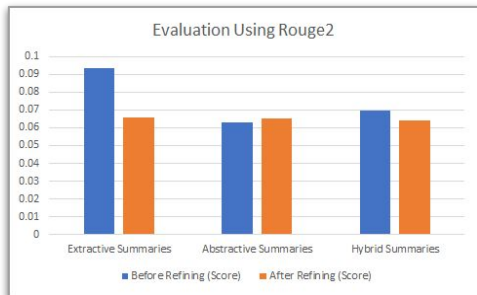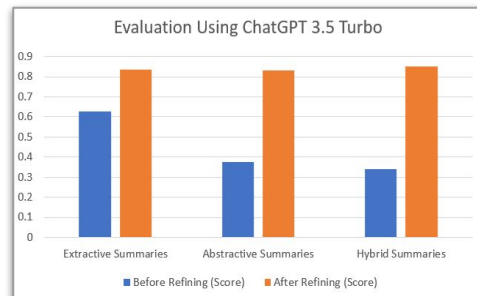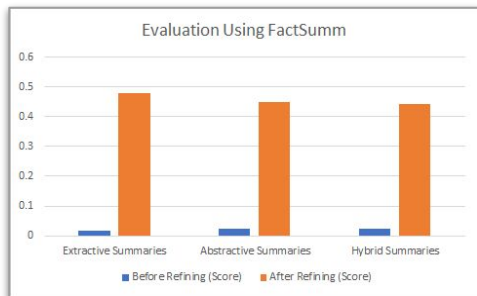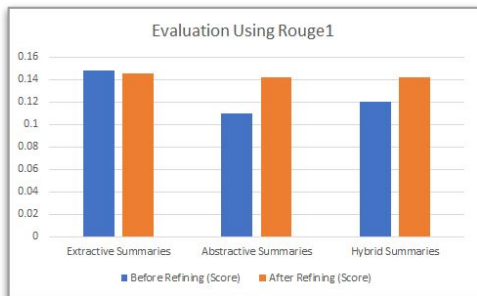- **Combining multiple methods improves detection of factual consistency**

- **LLMs improve the ensemble**

- **Best ensemble: LLM evaluation at various temperatures**
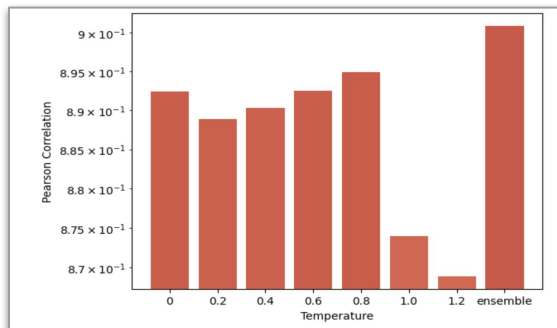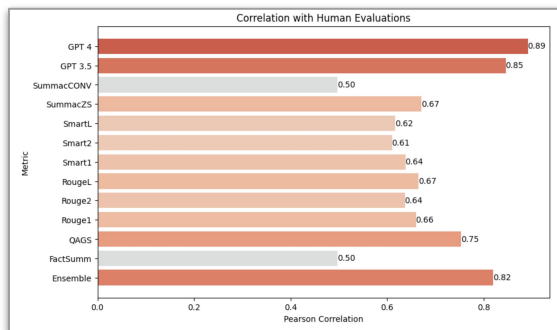
Demonstrated feasibility of improving factual consistency by refining summaries
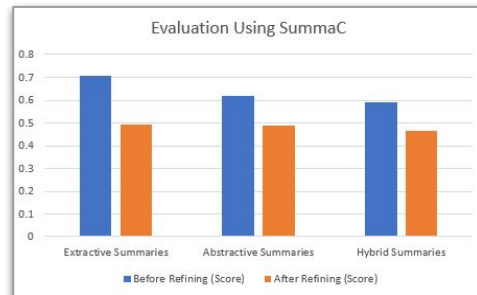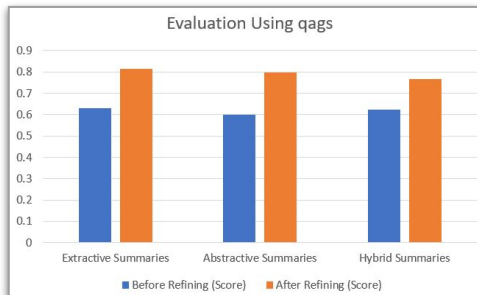
INNOVATION AWARDS

Team developed award-winning **digital assistant** that delivers manufacturing key performance indicators (KPIs) to **make informed decisions quickly and effectively**

- *Pioneered the use of Conversational AI to ask questions in English rather than having to learn SQL to get the data*
- *Integrated multiple emerging technologies enabling digital transformation in Industry 4.0*
- *Produced data visualizations of manufacturing operations*
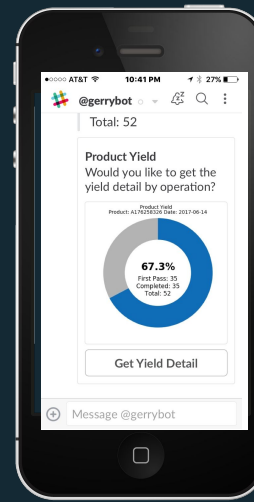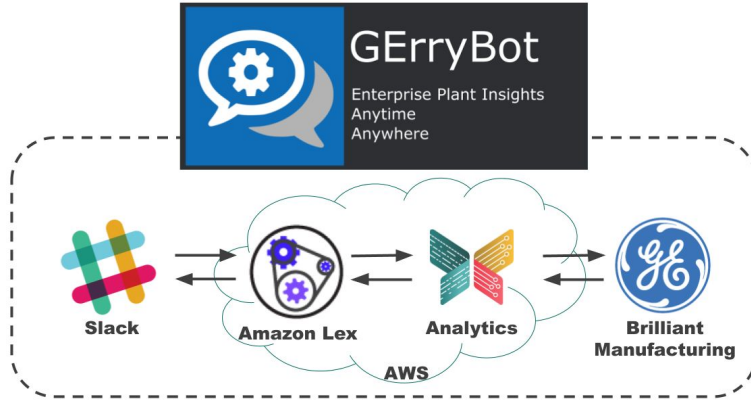
Get real-time KPI data at your fingertips in *seconds* rather than waiting for a report the next day

- Yield
- Products scrapped
- Percent complete
- Work in Process (WIP)
- Defects per Unit (DPU)
- Lead Time

Winners of the GE Brilliant Hacks AWARDS

❖ Grand prize winner

❖ Highest potential value to manufacturers

Transforming operations with Analytics, AI & Automation

ABOUT US

DataCrunch Lab, L. L. C. is an IT professional services and technology development organization providing customized solutions that leverage data science, machine learning, artificial intelligence, and Internet of Things.

OUR FOCUS

We have 20+ years of professional experience with the ability to architect, design, and develop highly complex IT solutions focused on achieving business outcomes. We provide:

- **Consulting Services** – Trusted advisor providing strategy, training, and advisory services
- **Solution Development** – Custom design and implementation of AI/ML/IoT solutions
- **Integration Services** – Deployment of data platforms, integration with cloud services, edge, and on premise solution

AWARDS

★ **JAIC Data Readiness for Artificial Intelligence Development (DRAID) Services BOA**

★ **DoD SBIR Contract: N68335-20-C-0725**
Project Title: Integrated data environment for digital logistics to improve resiliency of remote, fragile systems

★ **GE Brilliant Hacks** - Grand Prize Winner & Highest Potential Value to Manufacturers

Thank you!

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