Intelligent* dialog for conversational interfaces

* dynamic, data-driven, context-aware
Intelligent* dialog for conversational interfaces with NL capabilities powered by GF

* dynamic, data-driven, context-aware
Founded in June 2016
First two projects live in May & August 2017
Messenger

Hybrid NLU (GF + ML)

Template-based NLG (GF)

User model

Dialog management

Data source
Hybrid NLU

Should be:

- **80 % ML** (for robust parsing of majority of messages)
- **20 % GF** (for specific expressions relying on domain knowledge)
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Examples:

- Ich hab einen schlimmen Kater
- was leichtes
- eiweißreich
- ohne Käse
Hybrid NLU

Should be:
- 80 % ML (for robust parsing of majority of messages)
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Currently is:
- 80 % GF (with chunk parsing for robustness)
- 20 % ML (due to lack of training data)

Examples:
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Separate grammars for NLU and NLG
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- Natural language fragments of user and bot differ
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- Natural language fragments of user and bot differ

- Different requirements:
  
  **NLU**: focus on robustness (over-generating, normalized)
  
  **NLG**: focus on adequacy (clean)
NLU grammar
Core
(hand-crafted)

Domain
(generated from lexical item list + DSL)

Dialog
(hand-crafted)
NLU grammar

Future:
GF-free interface for grammar authoring

Core
(hand-crafted)

Domain
.generated from lexical item list + DSL)

Dialog
(hand-crafted)
Sounds exciting?

Get in touch!