# Joy of Living

Reeve Blake

# Natural Language Processing

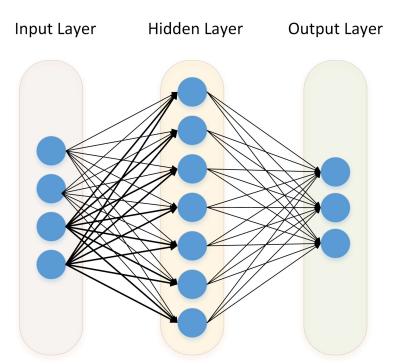
Your newest friend, your computer.

- Translates natural human language for computers
- Allows more meaningful interactions in a virtual environment
- Enables computers to create text and speech naturally



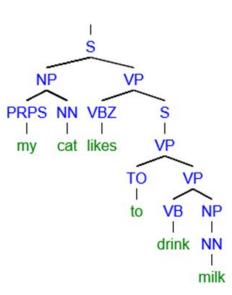
#### Natural Language Processing Crash Course

- Complex, but important
- Similar in ways to how a human learns
- Deep Learning
- Text Tags
- Code (Alam)



# Natural Language Processing Crash Course Cont.

- The old way: manually
- Manual teaching: Programming Guidance
  - Morphology
    - Meanings
    - Ambiguity (Yadav et al.)
  - Syntax
  - Semantics
  - Pragmatics



#### Outcomes & Impacts

- A helpful assistant to understand what you need
- A friend to rely on
- A safeguard against malicious people
  - Antiviruses
  - Filtering mean messages
- And much more

#### Virtual Reality

... More or less.

Virtual reality has been developed for years now by a range of different companies.

- Google Daydream
- Facebook Oculus
- Steam Powered Vive

These are all mainly visual experiences

# Virtual Reality Technology

There are many different parts of a headset and a lot of development that goes into each part.

- Resolution
- Detection
- Proformance
- Battery
- Hassle



#### Virtual Reality Research

Along with the technology that is always trying to be improved, there are other concerns for virtual reality users and developers.

- Cybersickness (Oh and Lee)
  - Force Plates
- Trust in Virtual Non-Human companions (Sun and Botev)
- Dealing with the senses
  - Haptic feedback

#### Outcome & Impacts

Virtual Reality could be the future of our civilization, as we advance toward a more virtual populus every day we spend on our phones and computers.

- Consciousness storage
- Full body "Deep dive"
- Gaming
- Shopping
- Food

#### **Works Cited**

Alam, Shahid. "Applying Natural Language Processing for Detecting Malicious Patterns in Android Applications." *Forensic Science International: Digital Investigation*, Elsevier BV, Dec. 2021, p. 301270. *Crossref*, doi:10.1016/j.fsidi.2021.301270.

"How Does Natural Language Processing Work? - IONOS." *IONOS Digitalguide*, https://www.ionos.com/digitalguide/online-marketing/online-sales/how-does-natural-language-processing-work/. Accessed 30 Nov. 2021.

Oh, HyeJin, and GyuChang Lee. "Feasibility of Full Immersive Virtual Reality Video Game on Balance and Cybersickness of Healthy Adolescents." *Neuroscience Letters*, Elsevier BV, Aug. 2021, p. 136063. *Crossref*, doi:10.1016/j.neulet.2021.136063.

Sun, Ningyuan, and Jean Botev. "Intelligent Autonomous Agents and Trust in Virtual Reality." *Computers in Human Behavior Reports*, Elsevier BV, Aug. 2021, p. 100146. *Crossref*, doi:10.1016/j.chbr.2021.100146.

Yadav, Apurwa, et al. "A Comprehensive Review on Resolving Ambiguities in Natural Language Processing." *AI Open*, Elsevier BV, 2021, pp. 85–92. *Crossref*, doi:10.1016/j.aiopen.2021.05.001.