Information about Alf

Alf Karlsson graduated from law school in 1996. After a successful career in the Swedish judicial system, Alf Karlsson held positions as administrative director at Mälardalen University and as head of unit at the Swedish Green Party Parliamentary Secretariat. From October 2014, he served at the Prime Minister's Office coordinating matters on housingand digitalization, and in June 2016 he was appointed State Secretary to the Minister for Housing and Digital Development, Mr Peter Eriksson.

Cybersecurity profiling and rating using active and passive external reconnaissance.

A method to generate an attack graph, comprising (patent US11025674):

1. selecting a first state node as a starting point of a cyber attack, the first state node corresponding to access to a first host in a network;
2. coupling the first state node to a first prerequisite node having a first precondition satisfied by the first state node using a first edge;
3. coupling the first prerequisite node to a first vulnerability instance node having a second precondition satisfied by the first prerequisite node using a second edge;
4. coupling the first vulnerability instance node to a second state node having a third precondition satisfied by the first vulnerability instance node using a third edge;
5. determining if a potential node, having a fourth precondition satisfied by a current node on the attack graph, provides a fifth precondition equivalent to one of preconditions provided by a group of preexisting nodes, the group of preexisting nodes comprising the first state node, the first vulnerability instance node, the first prerequisite node and the second state node;

Named entity recognition

Named-entity recognition (NER) (also known as (named) entity identification, entity chunking, and entity

extraction) is a subtask of information extraction that seeks to locate and classify named entities mentioned in unstructured text into pre-defined categories.

- person names
- organizations
- locations
- medical codes
- time expressions
- quantities
- percentages.

Table 1. Different entities

Entity	F1 measure
Person	64.76
Organization	71.56
Location	54.46
Product	97.92

Most research on NER/NEE systems has been structured as taking an unannotated block of text, such as this one:

Jim bought 300 shares of Acme Corp. in 2006.

And producing an annotated block of text that highlights the names of entities:

Jim (Person) bought 300 shares of Acme Corp. (Organization) in 2006 (Time).

Table 2. Results of NER models

Method	Precision	Recall
LSTM	0.978	0.572
neural networks	0.683	0.237
regular expressions	0.261	-