Seamless …….

…… @ KOM

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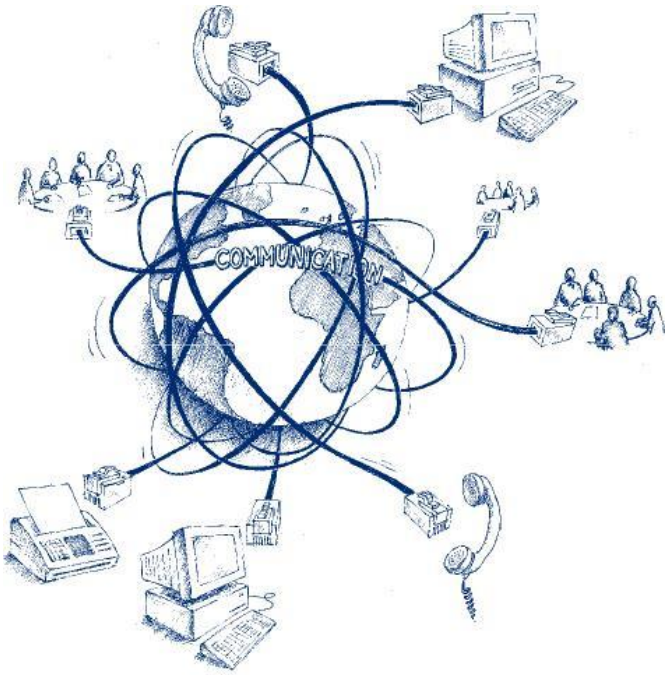

Tim Unverzagt

Prof. Dr.-Ing. Ralf Steinmetz
KOM - Multimedia Communications Lab

Source: http://www.sycor-asia.com/opencms/as/products_services/complementary_services/Telecommunication/

Structure

TECHNISCHE UNIVERSITÄT DARMSTADT

- Introduction
- Motivation
- Background & Related Work
- Task Definition
- Progress
- Outlook

Structure

TECHNISCHE UNIVERSITÄT DARMSTADT

- Introduction
- Motivation
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Context of the thesis

- Task Definition
- Progress
- Outlook

Content of the thesis

Introduction I

Neural Networks

- Successful
- Computationally expensive
- In Execution (due to many weights)
  - Even more so in training

Lottery Ticket Hypothesis

- Many networks in use atm are overloaded (too many weights)
- From the moment of initialization there are smaller subnetworks that perform similar given the same amount of training
- These subnetworks can be deduced from the weights of the main network after it has concluded its training

Motivation I

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Int

Mot

B&R

Task

Pro

Out

Executability

- During Use

Trainability

- During Development

Background I

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Feed-forward Neural Networks

- …

Convolutional Neural Networks

- …

Image Classification

- …

Related Work I

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Pruning

- …

Network Arichtecture

- …

Task I

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Reproduction

- On MNIST

Transfer

- To Reuters-???
- Find Sensible model in using FFNN or CNN

Progress I

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Python-project

- Data-flow
- Find Sensible model in using FFNN or CNN

Experiments

- …
- …

Progress I

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Int

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Task

Pro

Out

More custom-layers

- CNN!
- …

More experiments

- …
- …

Thank you for your attention! Questions?

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