

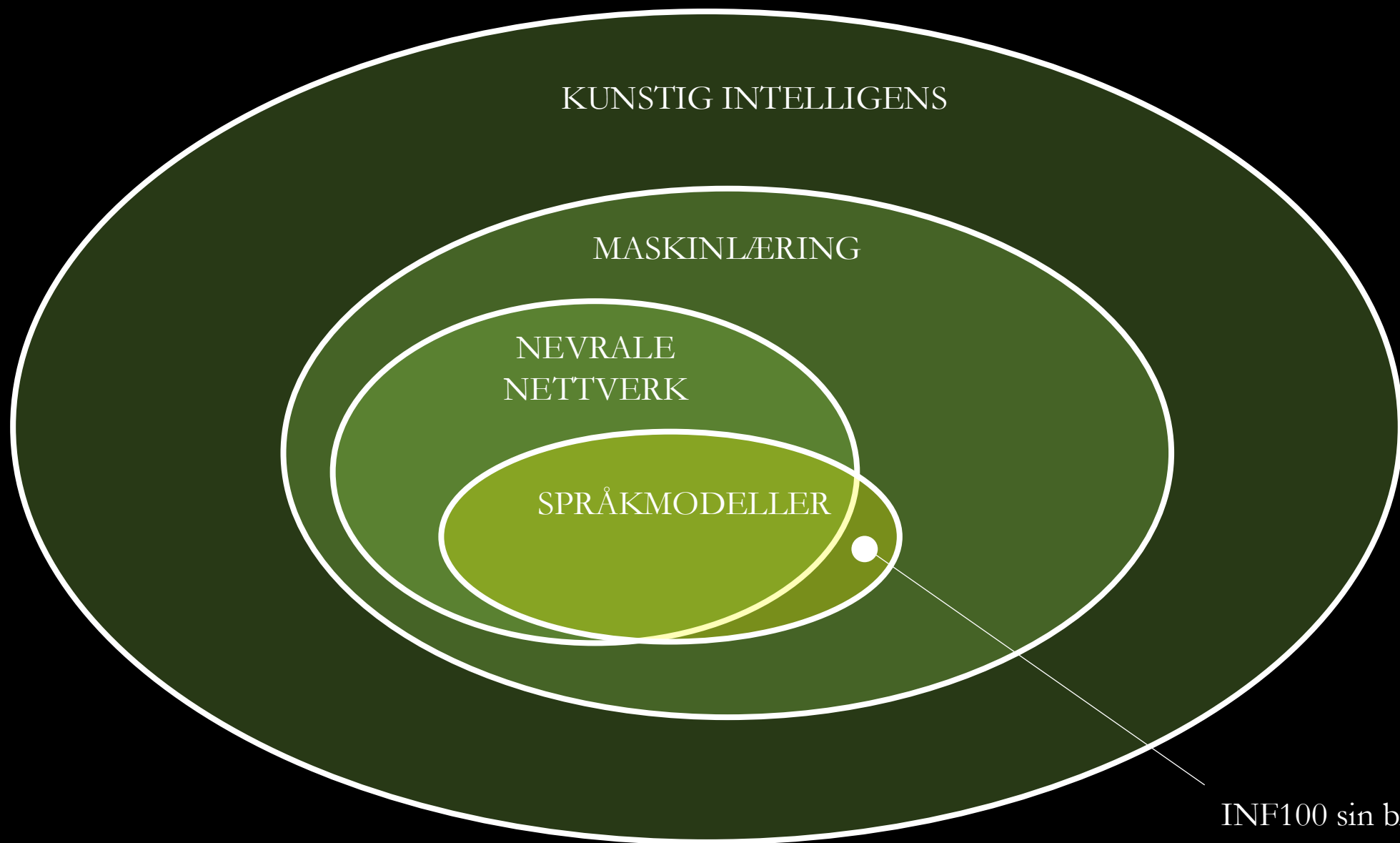
KUNSTIG INTELLIGENS

INF100

VÅR 2026

Crystal Chang Din

Med bidrag fra: Torstein Strømme



KUNSTIG INTELLIGENS

MASKINLÆRING

NEVRALE
NETTVERK

SPRÅKMODELLER

INF100 sin bitte
lille språkmodell

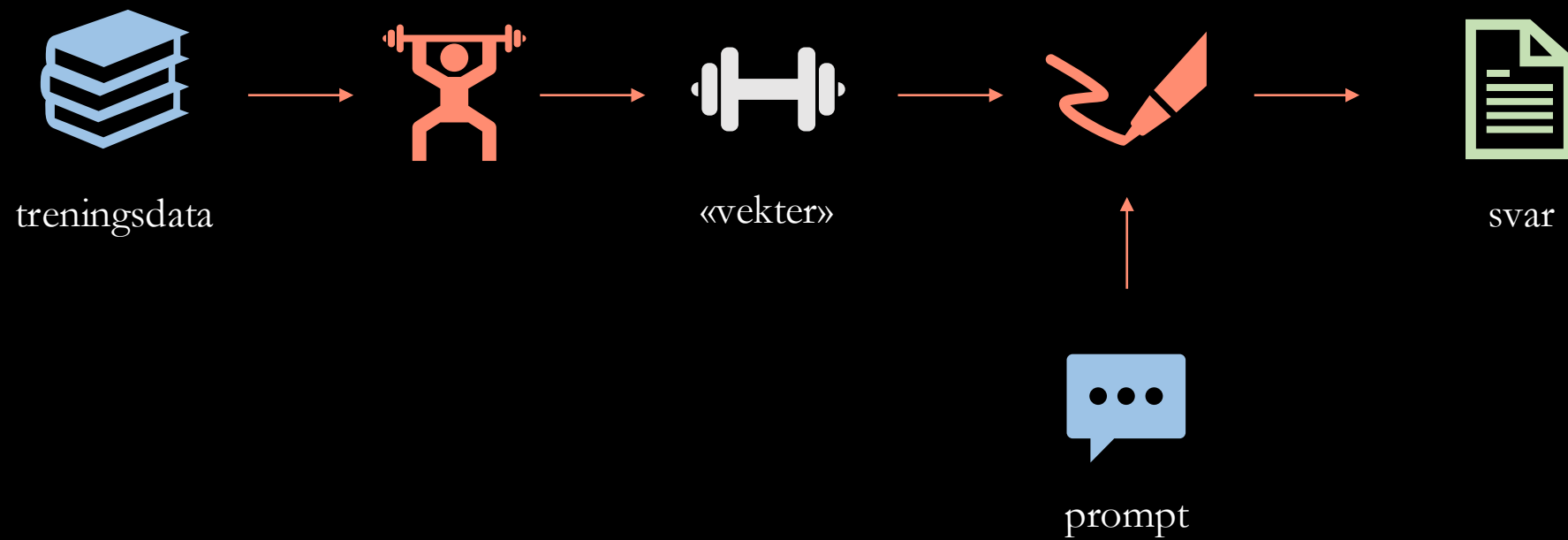
SPRÅKMODELLER

INF100 SIN BITTE LITEN SPRÅKMODELL

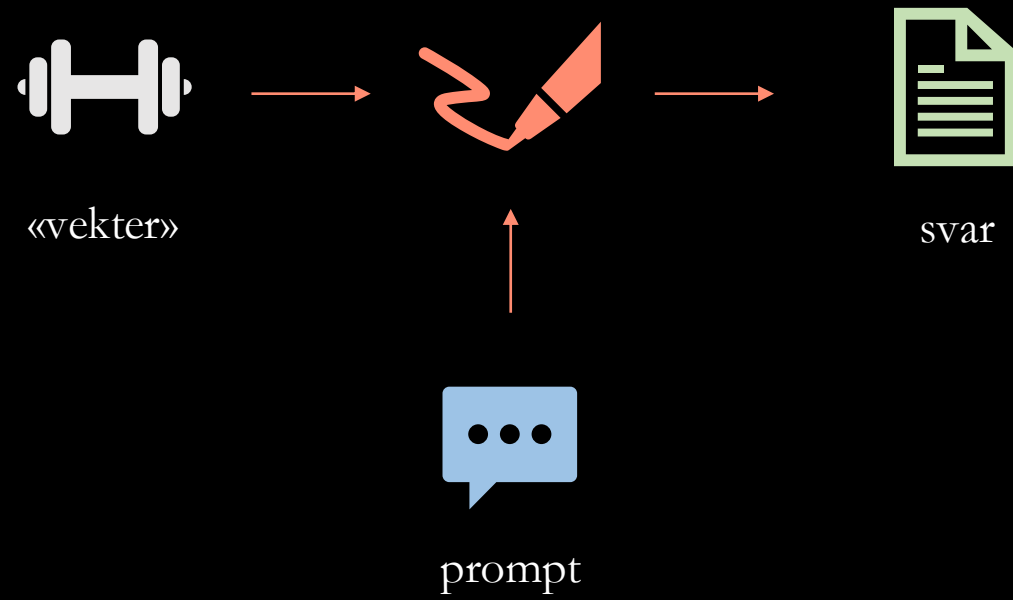
- ChatGPT, Copilot o.l. er eksempler på LLM -> **Large** language model
- I dag: vi skal lage en bitte liten versjon
- I stedet for å generere nye setninger, skal vi generer **nye ord**

FASE 1: TRENING

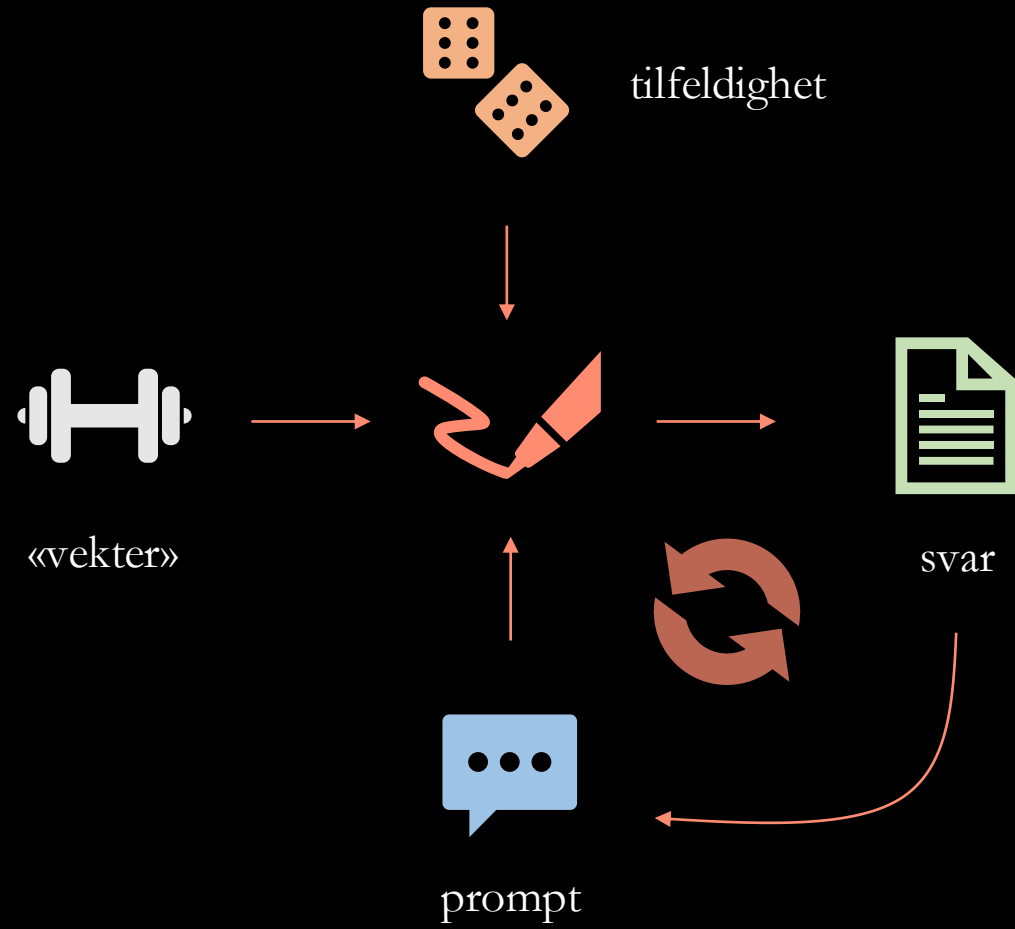
FASE 2: INFERENS



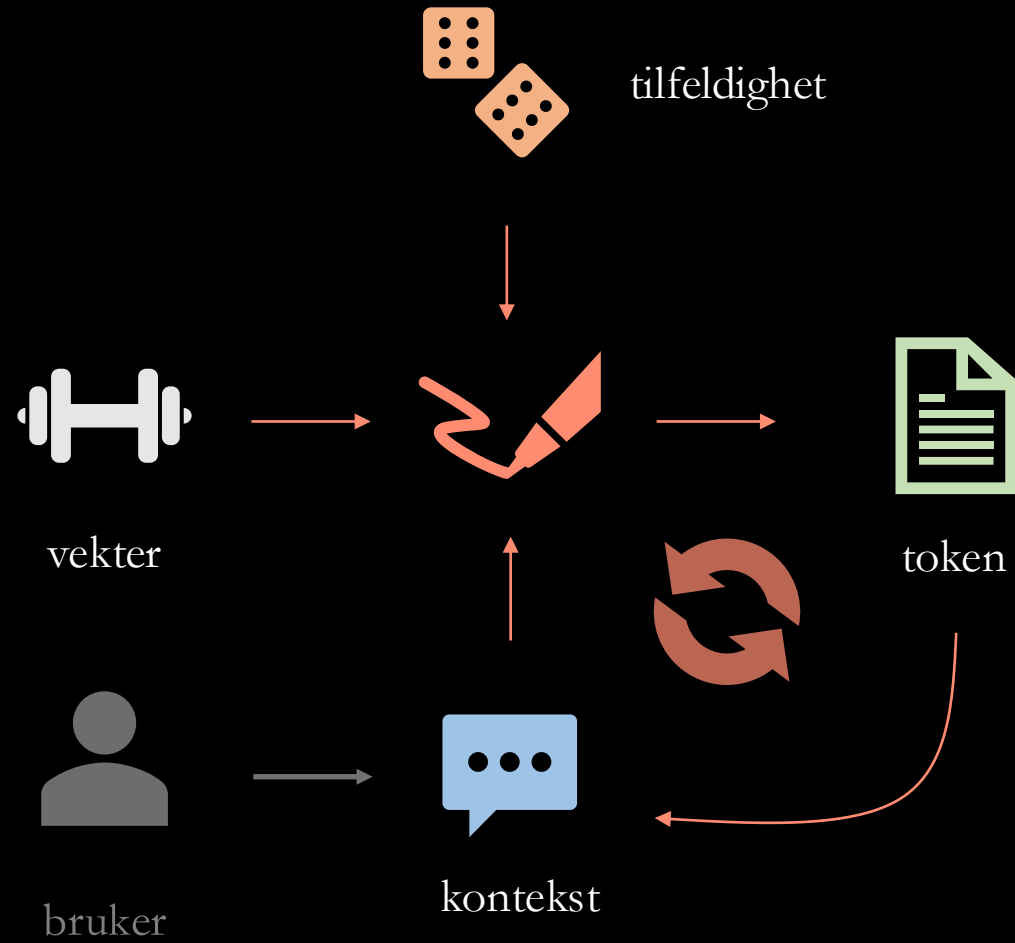
FASE 2: INFERENCE



FASE 2: INFERENCE



FASE 2: INFERENCE





kontekst
(prompt)

mulige neste token

vekker

(relativ sannsynlighet)

```
{
  "...": {
    "sa": {
      "k": 20,
      "m": 62,
      "t": 35,
      "g": 4,
      "l": 9,
      "n": 33,
      "s": 7,
      "v": 4,
      "b": 1,
      "i": 1,
      "r": 5,
      "y": 1,
      "d": 2,
      "a": 1
    },
    "ak": {
      "e": 38,
      "t": 59,
      "k": 26,

```

```
      "s": 31,
      "g": 2,
      "i": 2,
      "l": 4,
      "r": 3,
      "o": 5,
      "h": 1,
      "u": 2,
      "a": 2
    },
    "he": {
      "l": 42,
      "n": 53,
      "t": 44,
      "i": 8,
      "h": 2,
      "v": 10,
      "s": 6,
      "r": 19,
      "d": 1,
      "g": 2,

```

```
      "a": 2,
      "m": 4
    },
    "ko": {
      "m": 60,
      "n": 87,
      "l": 25,
      "r": 22,
      "s": 18,
      "h": 1,
      "g": 1,
      "e": 2,
      "b": 5,
      "p": 5,
      "v": 1,
      "t": 2,
      "d": 2,
      "k": 1
    },
    "om": {
      "m": 74,

```

```
      "r": 5,
      "a": 8,
      "t": 7,
      "s": 16,
      "p": 11,
      "g": 8,
      "k": 2,
      "f": 16,
      "i": 9,
      "h": 7,
      "e": 13,
      "b": 10,
      "o": 3,
      "v": 1,
      "l": 1
    },
    "mm": {
      "e": 130,
      "u": 16,
      "i": 3
    },

```

...

Demo

<https://inf100.i.uib.no/aktiviteter/sprakmodell/>