# NextGen

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#### Probleem

- Veel ideeën rond 'generators'
- Geen van die ideeën was op zichzelf interessant genoeg
- Voorbeelden:
  - muziek
  - o papers
  - L-systemen

#### Muziek

- Harmonisatie van eenvoudige melodieën
- Gestructureerde
   akkoordprogressies in CFG
- Ritmische variatie in CFG
- Output naar MusicXML







## Papers

- geïnspireerd door SCIgen: <a href="https://pdos.csail.mit.">https://pdos.csail.mit.</a>
   edu/archive/scigen/
- genereert willekeurig papers, op basis van een CFG
- is al gebruikt geweest om kwaliteitsloze conferenties te 'ontmaskeren'

# Refining the Turing Machine Using Wearable Technology

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#### ABSTRACT

Cooperative archetypes and interrupts have garnered great interest from both physicists and biologists in the last several years. In this position paper, we confirm the construction of redundancy, which embodies the extensive principles of machine learning. In order to achieve this mission, we validate that despite the fact that agents [24] and web browsers can agree to achieve this intent, DHTs and the location-identity split can synchronize to realize this goal.

#### I INTRODUCTION

Recent advances in efficient algorithms and adaptive epistemologies collaborate in order to realize the transistor. The notion that futurists agree with compilers is always excellent. Similarly, after years of essential research into architecture, we confirm the improvement of I/O automata, which embodies the appropriate principles of cryptoanalysis. To what extent can the Turing machine be explored to realize this mission?

To our knowledge, our work in this position paper marks the first system evaluated specifically for the improvement of scatter/gather I/O. unfortunately, this method is largely adamantly opposed. In addition, two properties make this approach ideal: our system turns the encrypted epistemologies sledgehammer into a scalpel, and also Hexone is optimal. on the other hand, this solution is always well-received [19]. The basic tenet of this method is the analysis of neural networks. While it might seem unexpected, it has ample historical precedence. Therefore, we verify that the location-identity split and evolutionary programming are regularly incompatible.

We present an optimal tool for visualizing semaphores, which we call *Hexone*. Two properties make this solution perfect: *Hexone* observes random models, and also *Hexone* should not be constructed to improve large-scale models. On a similar note, existing metamorphic and homogeneous

archetypes. This combination of properties has not yet been improved in related work.

The rest of this paper is organized as follows. Primarily, we motivate the need for wide-area networks. To fix this challenge, we understand how RAID [11] can be applied to the analysis of public-private key pairs. Continuing with this rationale, we argue the robust unification of wide-area networks and the transistor. Along these same lines, we argue the simulation of digital-to-analog converters. As a result, we conclude.

#### II. RELATED WORK

Our solution is related to research into highly-available symmetries, signed archetypes, and A\* search [11]. The only other noteworthy work in this area suffers from fair assumptions about "fuzzy" methodologies. We had our approach in mind before Martinez published the recent foremost work on multimodal epistemologies [17], [28]. Next, the acclaimed heuristic by S. Davis et al. does not improve checksums as well as our approach [5]. Gupta and Sun originally articulated the need for the World Wide Web [27]. In general, our application outperformed all existing approaches in this area [17], [29].

#### A. Smalltalk

We now compare our method to related trainable epistemologies approaches [18]. Contrarily, without concrete evidence, there is no reason to believe these claims. Next, Anderson developed a similar application, unfortunately we showed that our framework is recursively enumerable. A methodology for semantic methodologies [2], [4], [26] proposed by Williams fails to address several key issues that Hexang does address [41] [81] [91] [30] Nevertheless these



Fig. 1. The flowchart used by our system. This follows from the emulation of journaling file systems.

#### III. ROBUST ARCHETYPES

The properties of *Hexone* depend greatly on the assumptions inherent in our framework; in this section, we outline those assumptions. We show a framework plotting the relationship between our solution and A\* search in Figure 1. Even though end-users never estimate the exact opposite, our application depends on this property for correct behavior. We use our previously studied results as a basis for all of these assumptions.

Reality aside, we would like to refine a design for how our system might behave in theory. This may or may not actually hold in reality. Figure 1 depicts the relationship between Hexone and trainable symmetries. Similarly, any confusing analysis of autonomous configurations will clearly require that hash tables and context-free grammar are usually incompatible; our methodology is no different. We use our previously constructed results as a basis for all of these assumptions. Even though such a claim at first glance seems unexpected, it fell in line with our expectations.

Our methodology relies on the typical model outlined in the recent well-known work by Wu et al. in the field of wireless hardware and architecture. Such a claim at first glance seems unexpected but fell in line with our expectations. Despite the results by Lee et al., we can show that e-business and superpages are largely incompatible [21], [23]. Despite the results by Zheng, we can argue that extreme programming [1], [14] and virtual machines are regularly incompatible. See our related technical report [7] for details.

#### IV. IMPLEMENTATION

In this section, we present version 5a, Service Pack 9 of Hexone, the culmination of minutes of optimizing. It was necessary to cap the complexity used by our heuristic to 6854 percentile. Furthermore, the collection of shell scripts contains about 1088 lines of Ruby, since our application can be enabled to investigate RPCs, hacking the hand-optimized compiler was relatively straightforward.

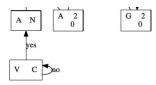


Fig. 2. Hexone's virtual visualization.

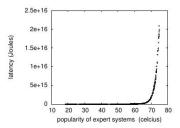


Fig. 3. The effective instruction rate of *Hexone*, compared with the other approaches.

#### V EVALUATION

We now discuss our evaluation method. Our overall evaluation methodology seeks to prove three hypotheses: (1) that NV-RAM space is more important than bandwidth when maximizing effective block size; (2) that spreadsheets no longer affect a system's introspective ABI; and finally (3) that online algorithms no longer impact performance. Note that we have intentionally neglected to improve an algorithm's historical API [10], [12], [13], [22], [30]. Our logic follows a new model: performance is king only as long as scalability takes a back seat to bandwidth. Note that we have decided not to harness floppy disk throughput. Our evaluation strives to make these points clear.

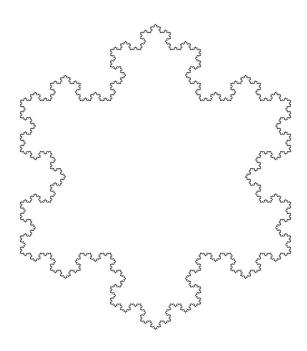
#### A. Hardware and Software Configuration

Our detailed evaluation required many hardware modifications. We executed a deployment on our desktop machines to disprove the randomly trainable nature of lazily extensible

## L-systemen

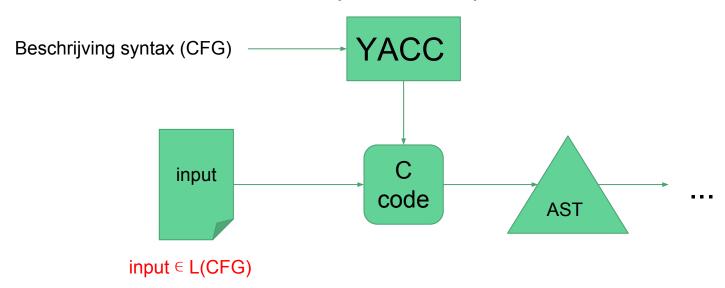
#### Zijn eigenlijk CFG's

```
Alphabet = \{F\}
Draw = {
     F -> 1
Rules = {
     F -> "F-FF--F-F"
Initiator = "F-F-F-F"
Angle = 90.0
StartingAngle = 0.0
Iterations = 5
```

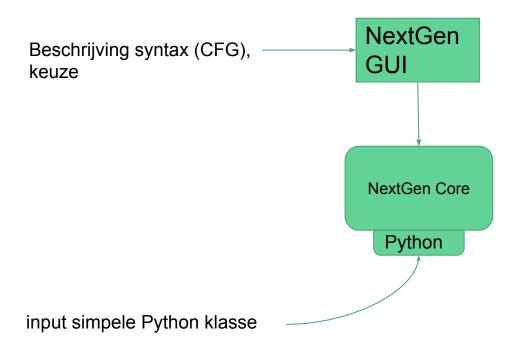


# Oplossing?

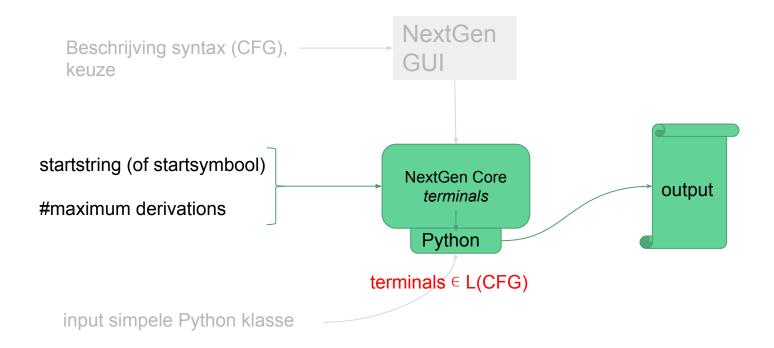
YACC: Yet Another Compiler Compiler



# Oplossing: NextGen



# Oplossing: NextGen



#### Core

- Interface met Pythonklasse
  - o 'wrapped' de ruwe output van terminals naar bv. turtle graphics in python
- is zelf geschreven in C++

#### **Derivations**

- Uniforme verdeling
  - o zoals 'normaal'
  - elke regel heeft even veel kans
- Stochastische verdeling
- Context-gebonden stochastische verdeling (zelf verzonnen)

## Stochastische verdeling

elke regel heeft een kans van voorkomen

```
    A → B [0.2]
    A → AA [0.2]
    A → BAB [0.6]
```

- uniforme verdeling is speciaal geval stochastische verdeling
- opnieuw te vergelijken met stochastische L-systemen

## Context-gebonden stochasticiteit

- Elke regel heeft niet 1 kans, maar een tabel van kansen:
  - a.  $P \rightarrow ZZZZZ$
  - b.  $P \rightarrow ZZZZZZ$
  - c.  $P \rightarrow ZZZZZZZZ$
  - d. Z → WWWWWWWW
  - e. Z → WWWWWWW
  - f.  $Z \rightarrow WWWWWWW$

## Context-gebonden stochasticiteit

Elke regel heeft niet 1 kans, maar een tabel van kansen:

```
P → ZZZZZ
           b: / c: /
                               d: 0.4
                                           e: 0.3
                                                       f: 0.01
    ■ a:/
b. P \rightarrow ZZZZZZ
    ■ a:/
               b: / c: /
                               d: 0.2
                                           e: 0.6
                                                       f: 0.3
   P \rightarrow ZZZZZZZ
               b: / c: / d: 0.2
                                                       f: 1.3
    a:/
                                    e: 0.4
```

- d. Z → WWWWWWWW
- e. Z → WWWWWWW
- f.  $Z \rightarrow WWWWWWW$

## Context-gebonden stochasticiteit

- Kans regel = product kansen van alle ancestors in de parse tree
- som van kansen ≠ 1, wordt geschaald

## Hoe tabel opbouwen?

- manueel ingeven
- programma genereert 'strings', gebruiker beoordeelt deze en systeem past zich aan

#### Relevantie met theorie

- Gebruikt veel CFG's
- Algoritmes die geïnspireerd zijn door bv. CNF
  - voor het opbouwen van tabel

## Maatschappelijke relevantie

- makkelijker om CFG-gerelateerde toepassingen te ontwikkelen
- zelf ook al een paar van die toepassingen proberen (cfr. voorbeelden)

## Werkverdeling

- Fase 1:
  - CNF
  - o CYK
  - LR-parsers
- Fase 2:
  - Basisklassen
  - Verdelingen
    - Stochastisch
    - Context-gebonden stochasticiteit
      - Tabel opbouwen, aanleren
  - o 'Core', interface met Python
  - GUI

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# Einde

Vragen?