



AHO-CORASICK AND RABIN-KARP IN MULTIPLE PATTERN STRING MATCHING

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Multiple pattern string matching is ...
Aho –

RABIN-KARP

Rabin-Karp uses hashing to find fixed length patterns in a text. The hashing function used is a rolling hash, meaning that the hash of $T[2 .. N+1]$ can be calculated from the hash of $T[1..N]$ in constant time.

If the hash values of $T[i .. N+i]$ and a pattern prefix of length N , the algorithm checks if the pattern occurs at text index i .

For P patterns of combined length m and a text of length n , the average running time of Rabin-Karp is $O(n+m)$ in space $O(P)$.

AHO-CORASICK

EXPERIMENTS

The style supports all of the university's different faculties and special departments which have an official colour scheme.

CONCLUSIONS

The colour scheme of the following faculties and departments is supported. This is a comprehensive list of all the official color schemes defined for our university.

- ▶ Faculty of Agriculture and Forestry
- ▶ Faculty of Arts
- ▶ Faculty of Behavioural Sciences
- ▶ Faculty of Biological and Environmental Sciences
- ▶ Faculty of Law
- ▶ Faculty of Medicine
- ▶ Faculty of Pharmacy
- ▶ Faculty of Science
- ▶ Faculty of Social Sciences
- ▶ Faculty of Theology
- ▶ Faculty of Veterinary Medicine
- ▶ Swedish School of Social Science
- ▶ Aleksanteri Institute
- ▶ Center for Information Technology
- ▶ Center for Properties and Facilities
- ▶ Helsinki Collegium for Advanced Studies
- ▶ Institute of Biotechnology
- ▶ Laboratory Animal Centre
- ▶ Language Centre
- ▶ Neuroscience Center
- ▶ Open University
- ▶ Palmenia Centre for Continuing Education
- ▶ Ruralia Institute
- ▶ University of Helsinki Library
- ▶ None (plain black and white)

CAN I HELP?

There are still various issues with the style. There are some problems with math fonts which I haven't been able to solve to my satisfaction.

Contributions and comments are always welcome. Contribute on Github or send email to olli.wilkman@iki.fi.

EXAMPLE 1: MATH

You can more or less use all the nice math features of \LaTeX in your poster:

$$\int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left(-\frac{(x-\mu)^2}{2\sigma^2}\right) dx = 1 \quad (1)$$

$$P(x) = \begin{cases} \frac{1}{6}x(x-1), & 0 \leq x \leq 1 \\ 0, & \text{otherwise} \end{cases} \quad (2)$$

$$\sum_{n=0}^{\infty} \frac{1}{2^n} = 2 \quad (3)$$

EXAMPLE 2: IMAGES AND REFERENCES

Including images is simple. With $\text{pdf}\text{\LaTeX}$, you can use images in many common formats, including PNG and JPEG, though in a poster you should strive to use scaleable graphics, for example in PDF format. Due to a limitation of $\text{pdf}\text{\LaTeX}$, EPS graphics do not work, but they can be converted to PDF.

Using labels to refer to figures and tables also works like it should, as demonstrated by these references to Figure 1 and Table 1.

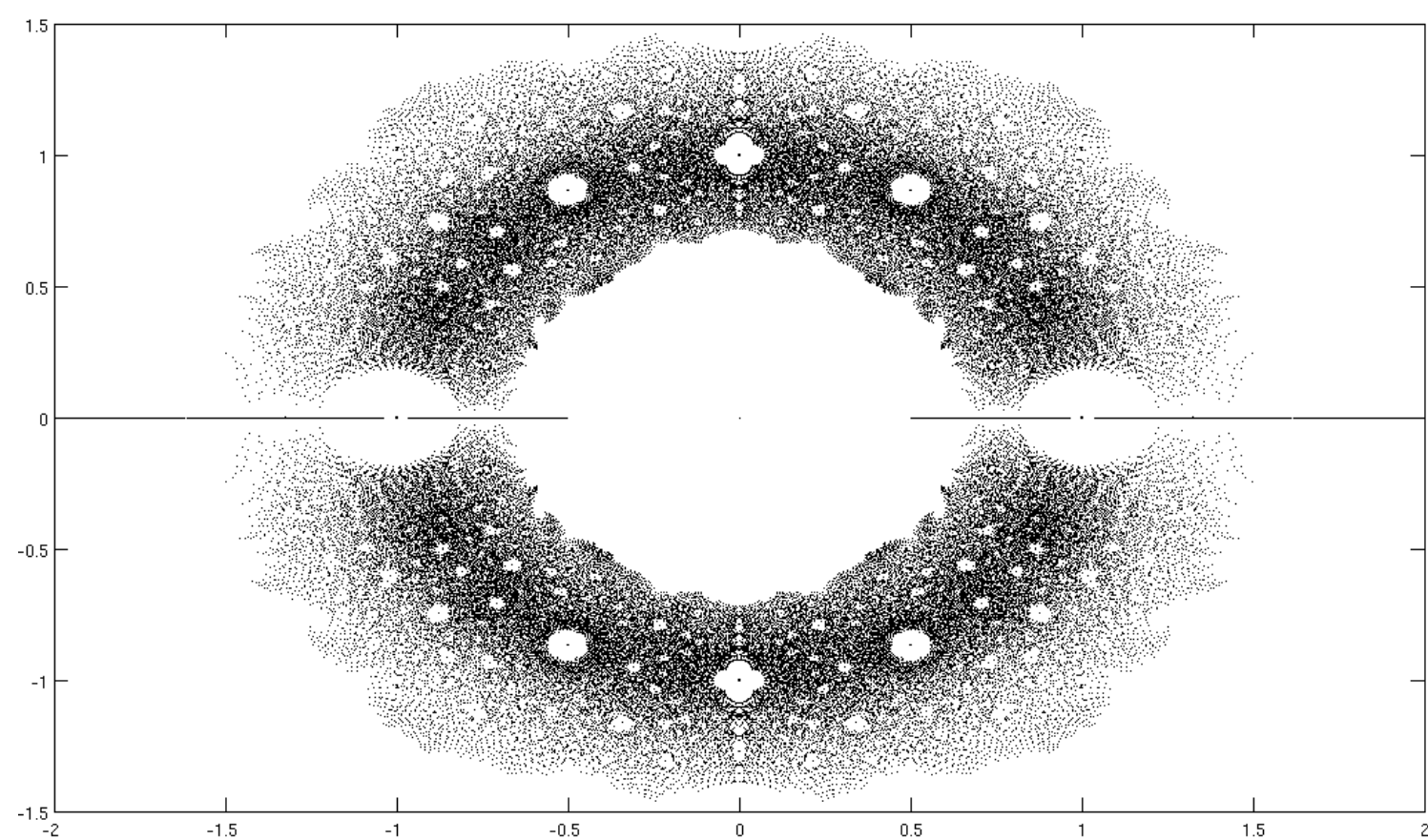


Figure 1: Some mathematical plot

Image courtesy of Janne Korhonen.

EXAMPLE 3: TABULATED TABLE

Table environments work, too.

x	x^2	x^3	x^4
1	1	1	1
2	4	8	16
3	9	27	81
4	16	64	256
5	25	125	625

Table 1: Some natural numbers and their first few powers.

WHERE CAN I FIND IT?

HYposter is hosted at Github for ease of development and cooperation. Get it at <https://github.com/dronir/HYposter>.