

Design of a diagnosis and follow-up platform for patients with chronic headaches

Kiani Lannoye & Gilles Vandewiele

Faculty of Engineering and Architecture

Intro

Platform requirements

Mobile application

Backend and data exposure

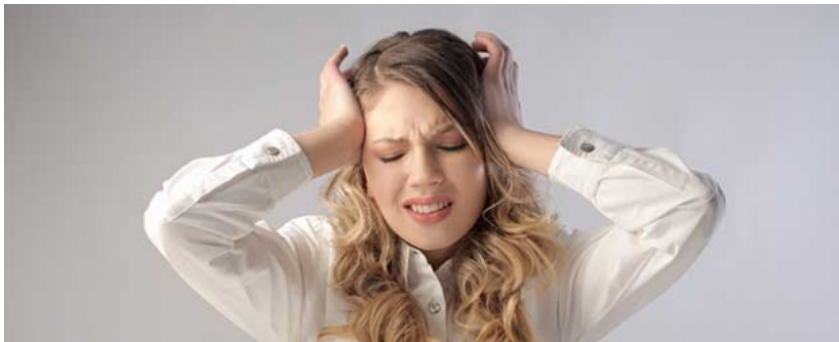
Machine learning - decision trees

Genetic merging of decision trees

Visualization - doctor dashboard

Conclusion & future work

Introduction



Headaches

Headaches

Figure: Headaches overview

Headaches

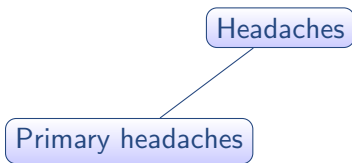


Figure: Headaches overview

Headaches

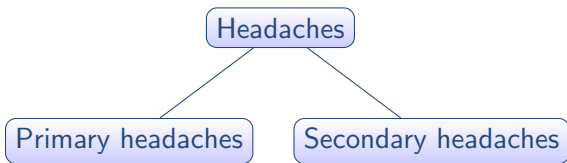


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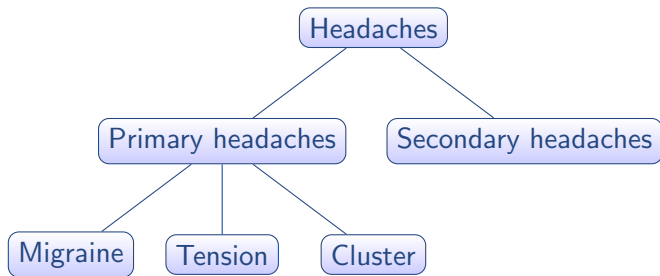


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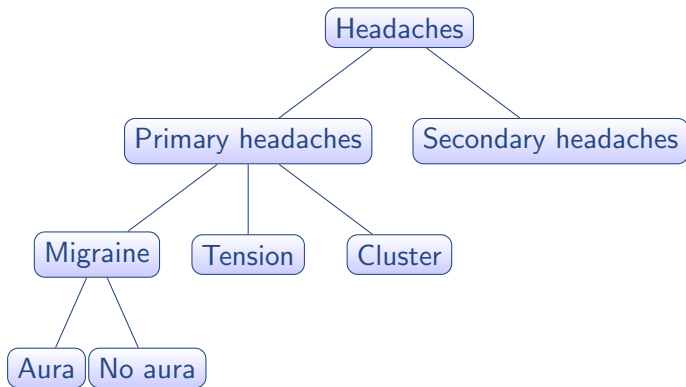


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Platform requirements

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Machine learning - decision trees

Genetic merging of decision trees

Visualization - doctor dashboard

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Intro

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Backend and data exposure

Machine learning - decision trees

Genetic merging of decision trees

Visualization - doctor dashboard

Conclusion & future work

Intro

Platform requirements

Mobile application

Backend and data exposure

Machine learning - decision trees

Genetic merging of decision trees

Visualization - doctor dashboard

Conclusion & future work

Machine learning - decision trees

Intro

Genetic merging of decision trees

Platform requirements

Visualization - doctor dashboard

Mobile application

Conclusion & future work

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Platform requirements

Mobile application

Backend and data exposure

Machine learning - decision trees

Genetic merging of decision trees

Visualization - doctor dashboard

Conclusion & future work

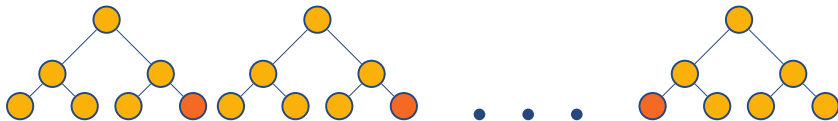
Many different induction algorithms

- ▶ QUEST
- ▶ CART
- ▶ C4.5 (C5.0)
- ▶ ...

→ **Which one is the best?**

Current ensembles lack interpretability

Boosting, bagging, random forests, etc. require majority voting (classification) or mean calculation (regression)



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Conclusion & future work

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Mobile application

Backend and data exposure

Machine learning - decision trees

Genetic merging of decision trees

Visualization - doctor dashboard

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Bedankt

Bedank voor uw aandacht

No written word,
No spoken plea,
Can teach the youth what they should be,
Nor all the books on all the shelves,
It's what the teachers are themselves

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