

# Programming Ubiquitous Things 2025/26 - Spring 2025 - UiO

## How to Give a Talk

Prof. Paulo Ferreira
paulofe@ifi.uio.no
UiO/IFI/PT

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*"title"* → The Elevator

*"Authors Names and Affiliation"* →
Paulo Ferreira
UiO

"Event / Location / Date ?" →
Jan. 1850
Albany, New York

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# Motivation



- Would you like to go from 3 level building to a N levels building?
- Build huge building with many floors
- Make lots of money selling/renting flats





***"present a scenario or a situation in which the audience is clearly interested on"***

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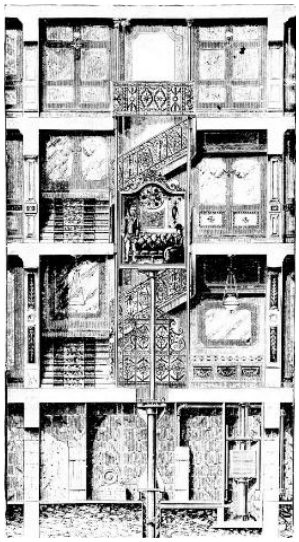




# Overall Goal / Objective

- Make a machine that allows to travel vertically
- We call it the "elevator"

- Requirements:
  - Cheap
  - Easy to manage
  - Safe
  - Robust
  - Available

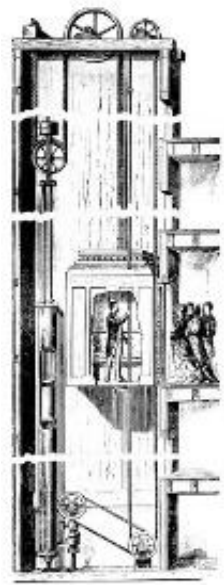


***"should derive directly from the motivation"***

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# Challenges / Difficulties / Problems

- Cables
- Efficient engine
- Big enough for people and luggage
- Confortable (speed, acceleration)
- Safety when fail occurs



*"correspond to the issues that the audience think about once they know the goal"*

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# Disadvantage of Other Solutions

- Elevator manually operated
- Not reliable
- Too small ( just one each travel)
- Elevator with an engine but its too expensive



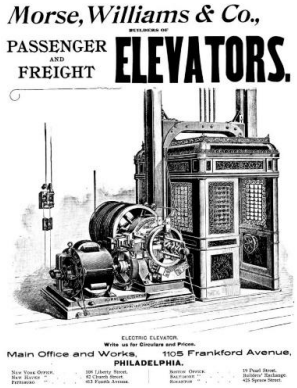
*"the audience thinks:*
*- ok, fine! let me go to the supermaket and buy an elevator, unless…. you convince them that there is no such thing, yet !"*

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# Solution – The ELEVATOR !!!!

- Diesel engine (re-designed for 24/24 operation)
- Great steel cables (elastic, strong new material)
- Counterweight (optimized for each case)
- Safe mechanisms (novel safety brake)

- Characteristics:
  - safe
  - fast
  - cheap
  - etc...



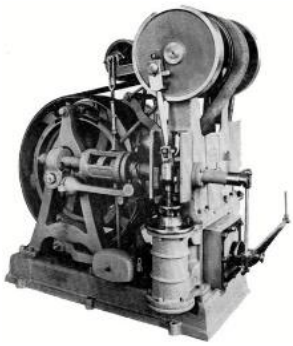

*"explain, in just one slide, the core idea, i.e. the novelty !"*

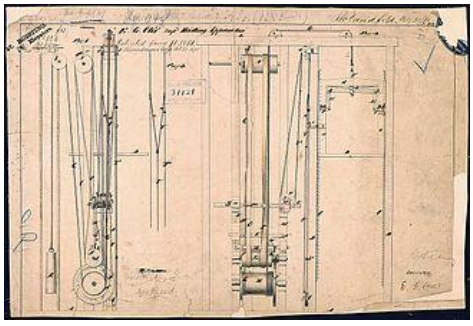
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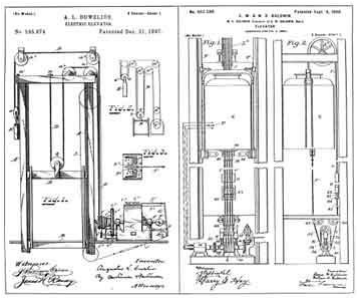




# Architecture / Algorithm







*"describe the system"*

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# Implementation



*"describe the prototype ! show the audience that it is feasible"*

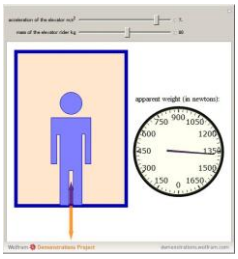
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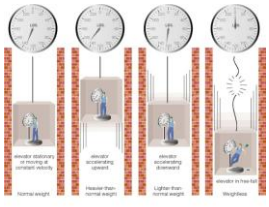




# Evaluation

- Experiments done
- Results obtained:
  - Tables
  - Graphs





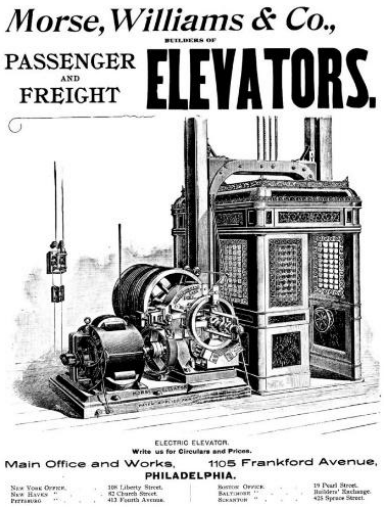


*"show the audience that your solution respects the requirements"*

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# Conclusion

- Elevator is great
  - Cheap
  - Easy to manage
  - Safe
  - Robust
  - Available
- Allows you to make taller buildings, with more flats to sell/rent
- Make more money




*"recap the most relevant issues"*

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Questions & Answers

more info: *www.TheBestElevatorYouCanBuy.com*

*"leave here your contact"*

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