



Compassionate Refactoring

@ClareSudbery



NOV. 04. 08
4GIFs.com

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Refactoring

- **What it is**
- **What it isn't**
- **Why it's desirable**
- **How to do it**

Why it doesn't happen

How to make it happen

- **COMPASSION**
-

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What is Refactoring?

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Martin Fowler

REFACTORING


In my refactoring book, I gave a couple of definitions of refactoring.

Refactoring (noun): a change made to the internal structure of software to make it easier to understand and cheaper to modify without changing its observable behavior.

Refactoring (verb): to restructure software by applying a series of refactorings without changing its observable behavior.



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**Not just
code**

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A low-angle, upward-looking photograph of several modern skyscrapers. The buildings feature glass facades and intricate architectural details, including a prominent tower with a perforated, lattice-like exterior. The sky is a clear, pale blue. A semi-transparent white rectangular box is centered over the image, containing the title text and two horizontal lines.

What isn't Refactoring?

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Satisfaction

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A low-angle, upward-looking photograph of several modern skyscrapers. The buildings feature various architectural styles, including glass facades and perforated metal screens. The sky is a clear, bright blue. A semi-transparent white rectangular box is centered over the image, containing the title text and two horizontal lines.

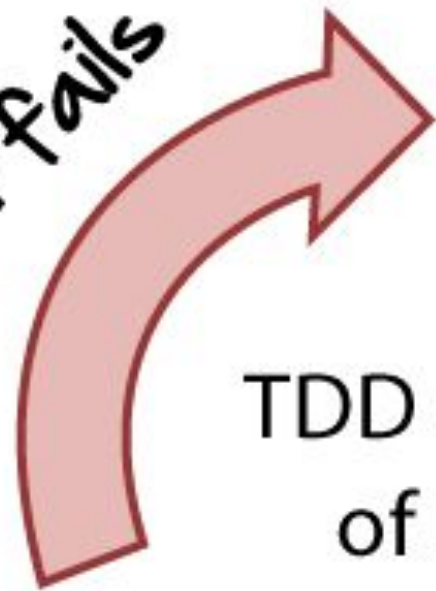
How to refactor

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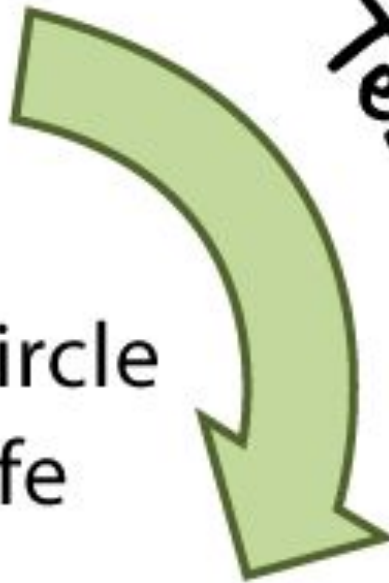


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Test fails



TDD circle
of life



Test passes



Refactor



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Refactoring blockers

- **External pressure**
 - **Impatience**
 - **Seeking perfection**
 - **No self-belief**
 - **No compassion...**
-


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External pressure

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**Seeking
perfection**

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Guilt

Shame

Despair

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I don't know

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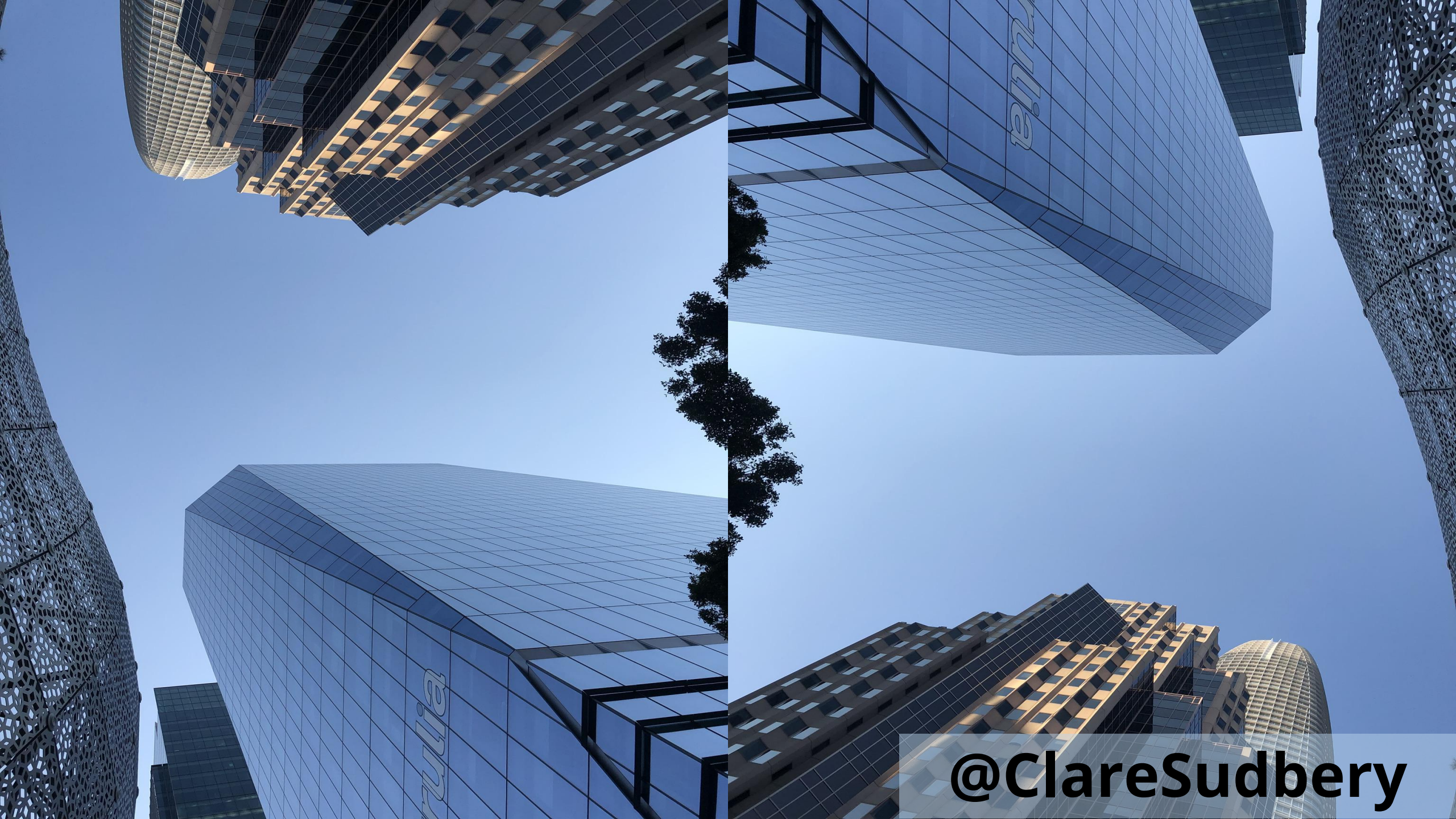


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**No
compassion...**

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How to facilitate refactoring

Use compassion to...

- Mitigate external pressure
 - Balance impatience
 - Embrace imperfection
 - Believe in ourselves
 - Seek joy
-

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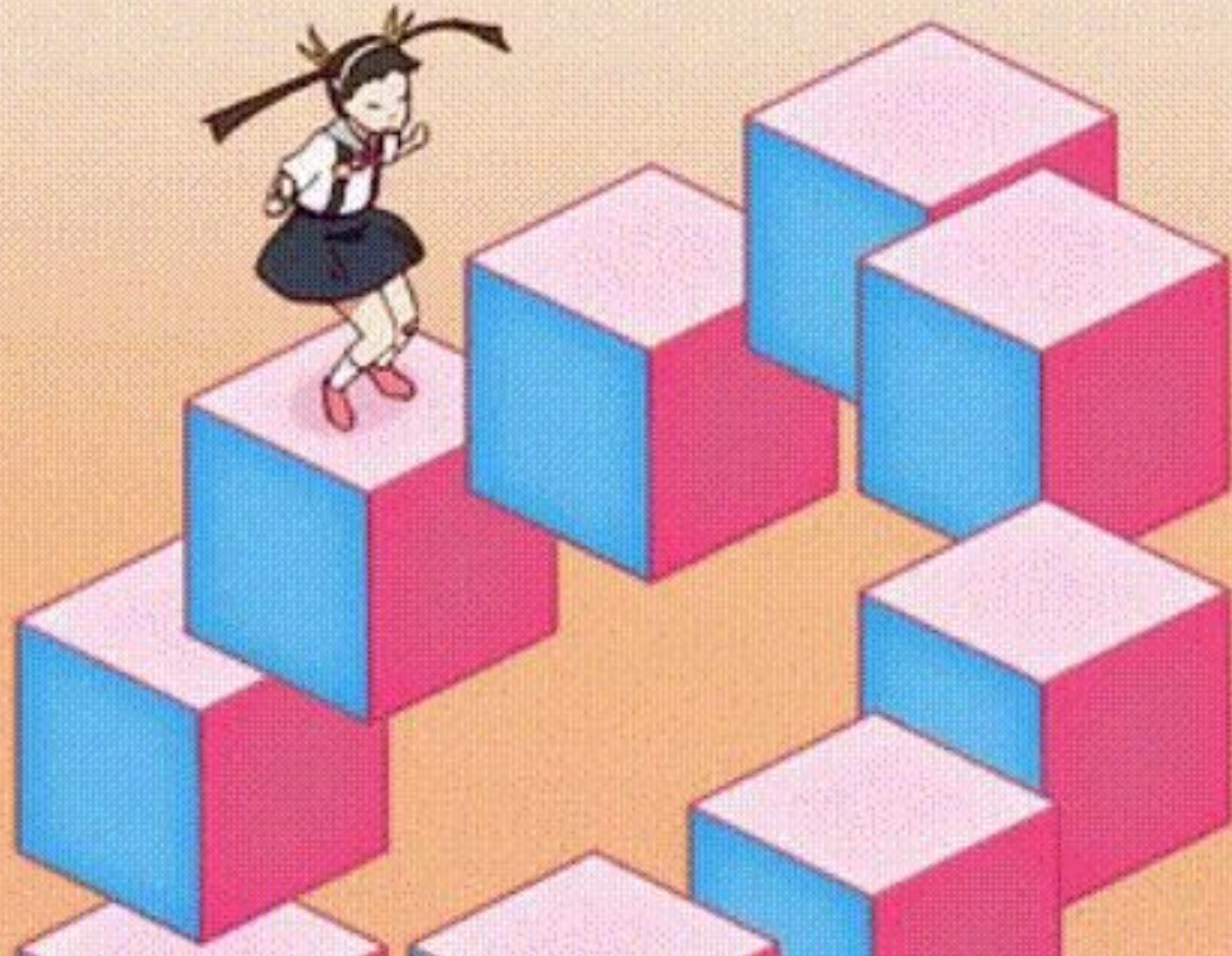


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DEADLINES

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Impatience

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The drive for perfection

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<https://ronjeffries.com/articles/-z022/0222ff/my-mistakes/>

"I don't tell people what to do or what not to do. I just show people what I do and what happens when I do it.

... There are things that I think are good but that I don't always do, and things that I think are not so good, that I sometimes do." – Ron Jeffries

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<https://ronjeffries.com/articles/-z022/0222ff/my-mistakes/>

"When code needs improvement and we don't improve it, things get worse. Somehow they don't manage to stay the same: they get worse.

Worse is not good. I'd go faster and be happier if I refactored more. But sometimes, I do not."
– Ron Jeffries

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Many More Much Smaller Steps – First Sketch

September 29, 2021 / 5 minutes of reading / [Muses](#), [Podcasts](#)

Part 1 of 5 in the series [Many Much More Smaller Steps](#)



Many More Much Smaller Steps - First Sketch | Anchor. #129

PawCast with GeePaw Hill • By GeePaw Hill • Sep 28, 2021



00:00

Support

Share

07:53

The first plank of my take on fixing the trade is MMMSS: If you want more value faster, take Many More Much Smaller Steps.

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THE MOST IMPORTANT THING

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#SchittsCreek



THIS IS A CRITICAL MOMENT

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Self belief

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THE WHEEL OF CONFUSION



Esra: SonarQube



Georgia: Golang



Ilianna: Terraform



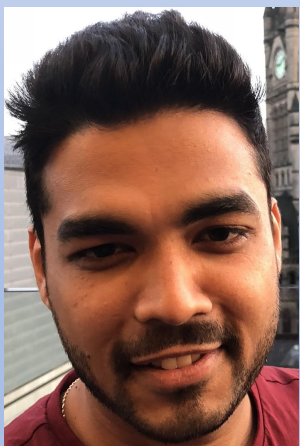
Jon: CentOS 7



Kirsty: Hadoop



Mircea: iOS Native



Anik: PySpark



Andy: Encryption



Scott: AiOps



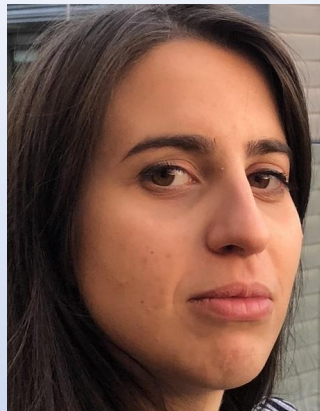
Rob: AWS



THE WHEEL OF CONFUSION



Golang



Terraform



CentOS 7



Hadoop



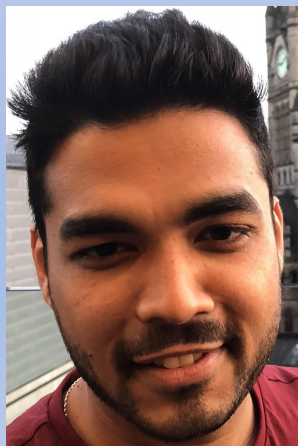
iOS Native



AWS



SonarQube



PySpark



Recursion



AiOps



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Terraform



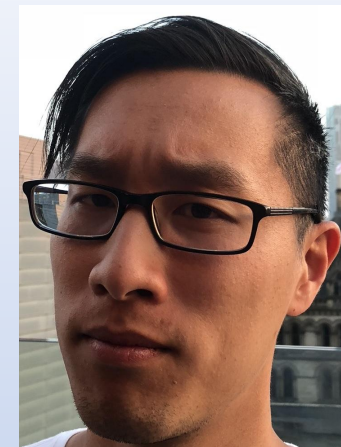
CentOS 7



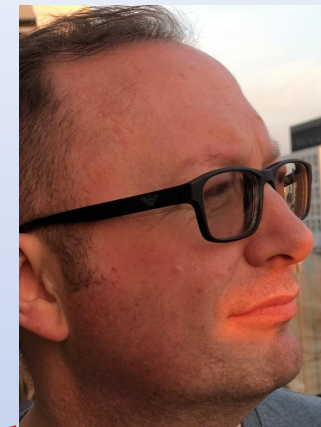
Hadoop



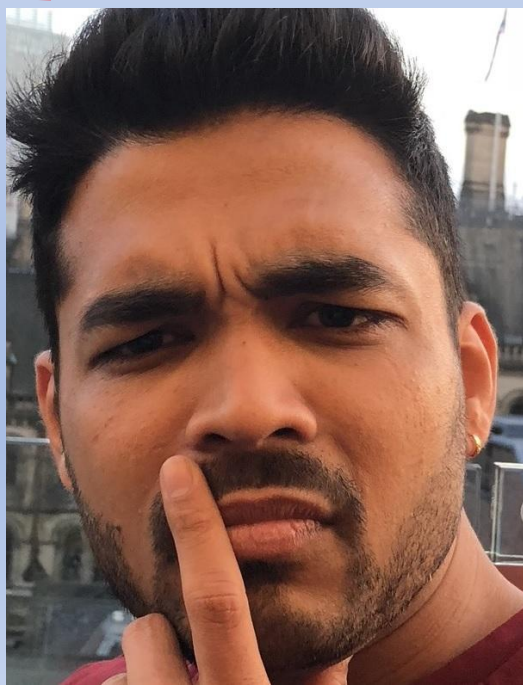
iOS Native



AWS



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Golang



SonarQube



Encryption



Recursion



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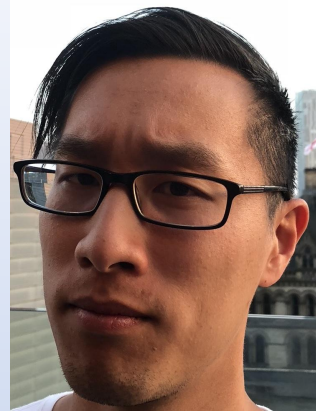
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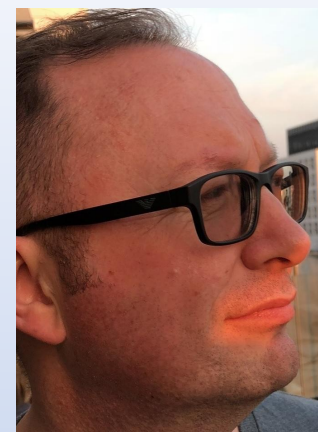
Hadoop



iOS Native



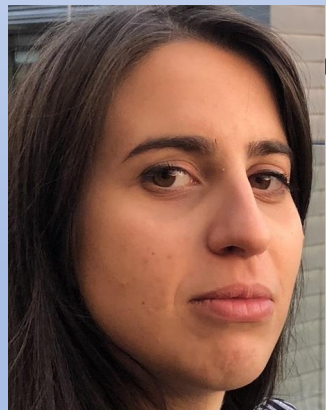
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AiOps



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Terraform



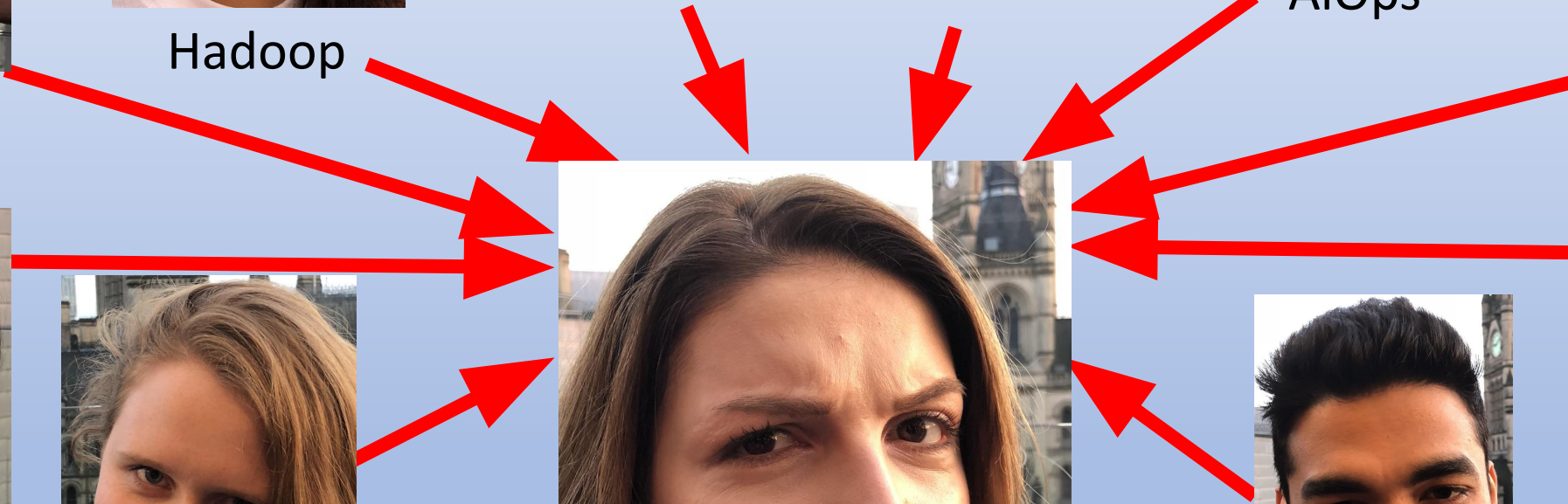
Golang



PySpark



Encryption



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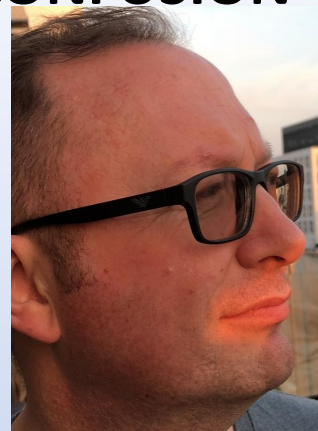
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iOS Native



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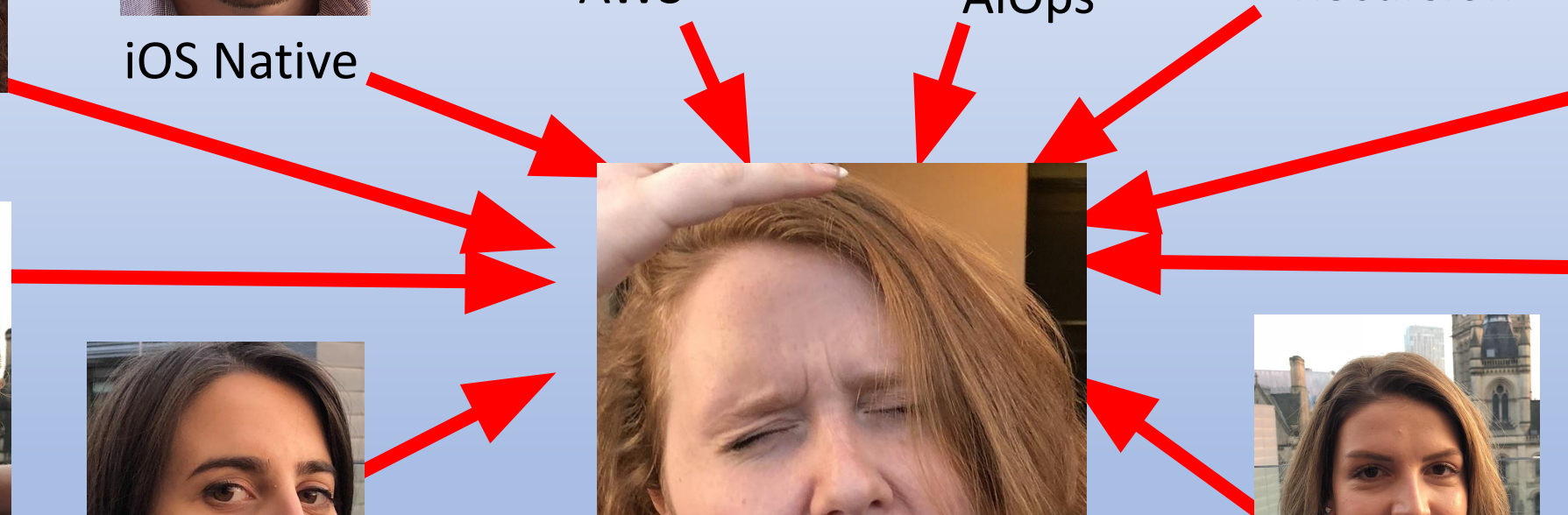
Terraform



SonarQube



PySpark



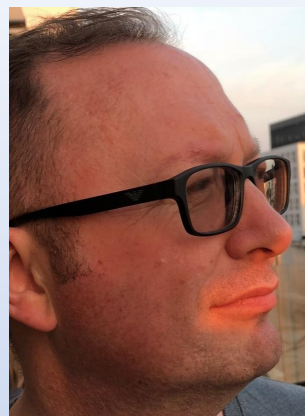
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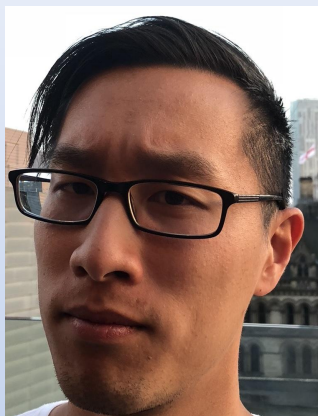
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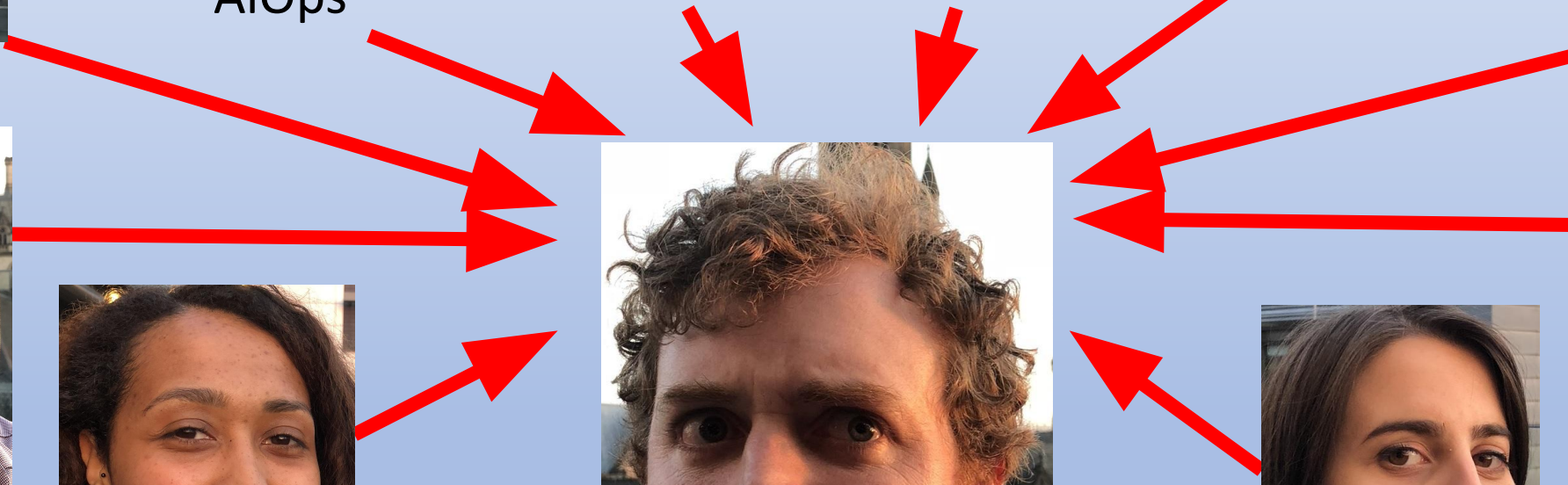
Hadoop



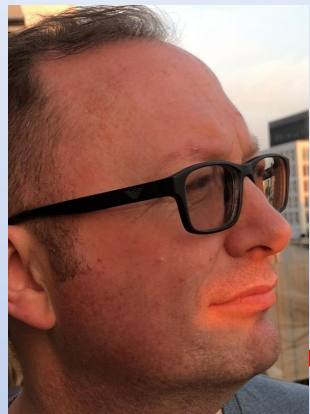
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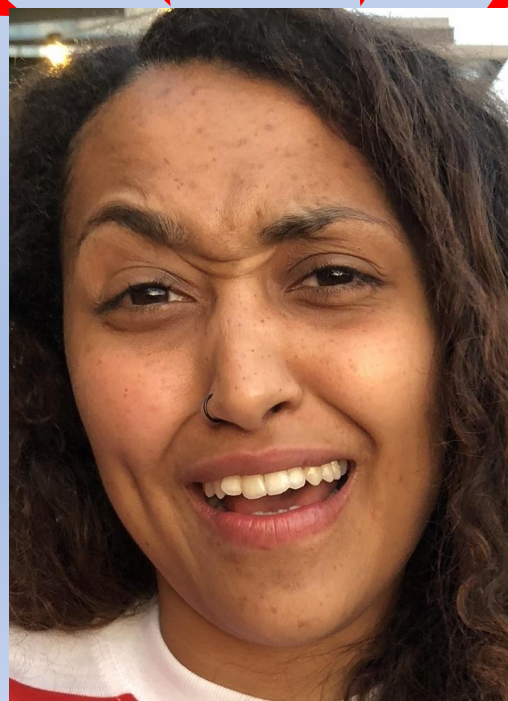
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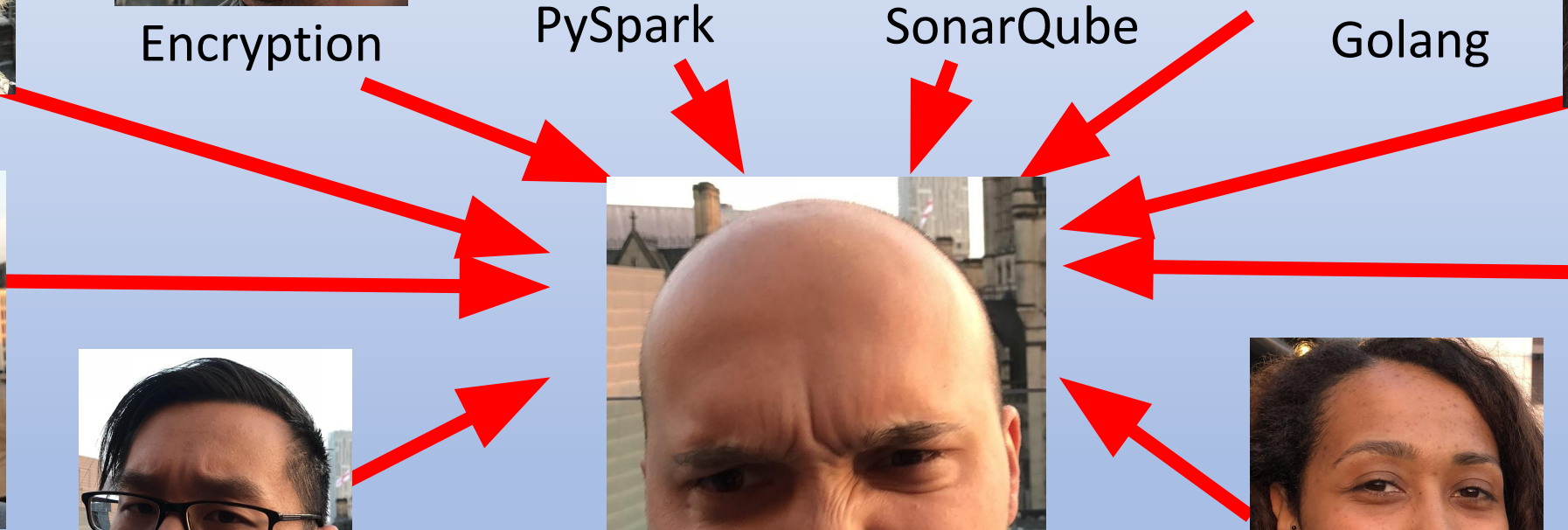
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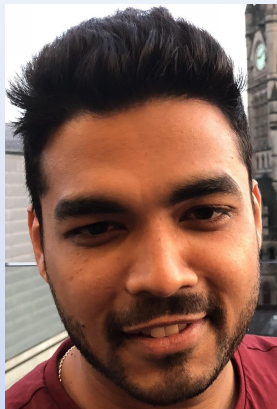
CentOS 7



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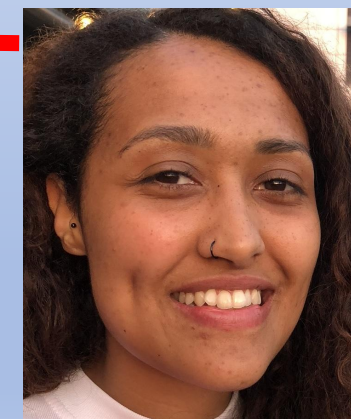
Recursion



AiOps



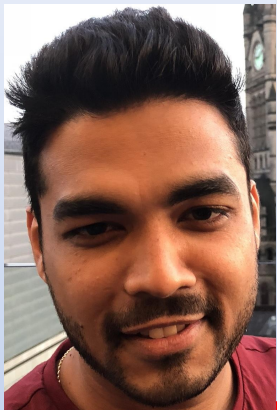
iOS Native



Hadoop



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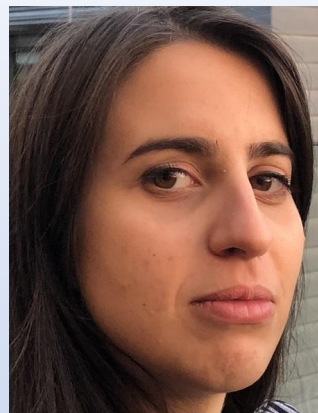
PySpark



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Encryption



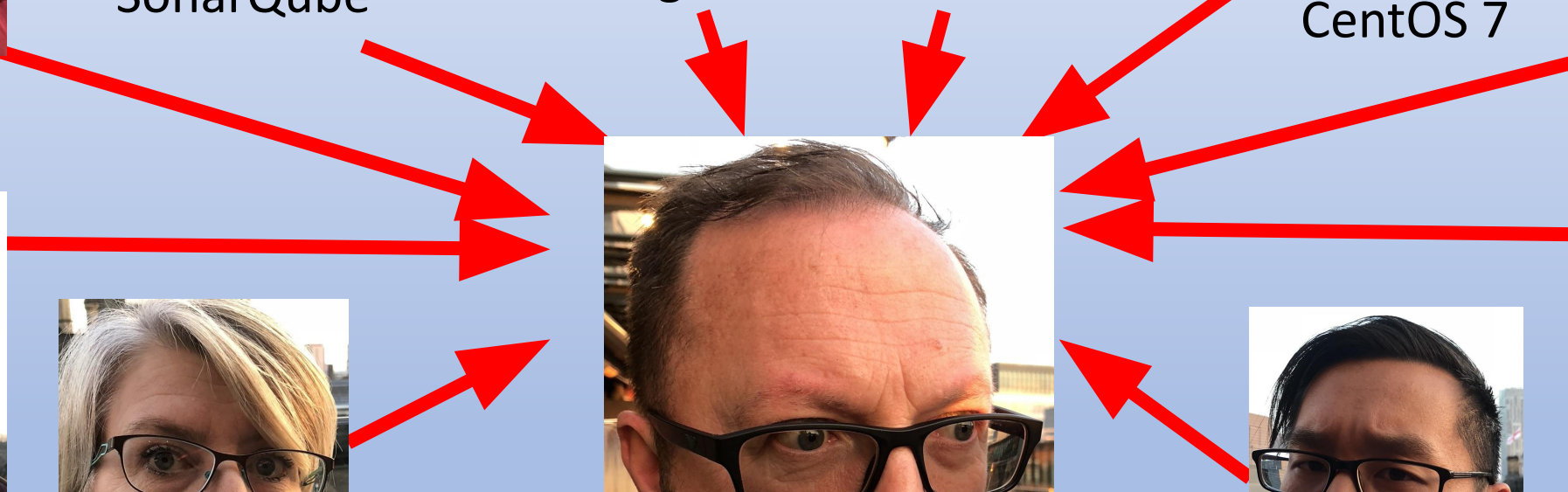
Recursion



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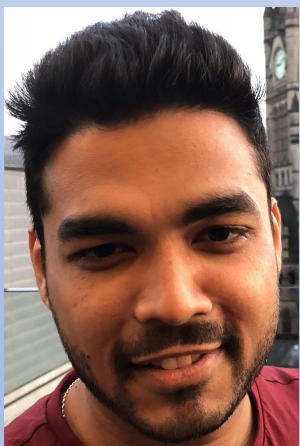
Data analytics



Hadoop



iOS Native



PySpark



Encryption



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Seeking joy

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Summary

Refactoring: Easier to understand / cheaper to modify

- **Continuous**
- **Tiny low-risk steps**
- **Testable**

Less likely when...

- **Low compassion**
- **Unreasonable deadlines**
- **Unrealistically high standards**
- **Feeling guilt or shame**

More likely with...

- **COMPASSION**
- **Time**
- **Embrace imperfection**
- **Focus on tiny improvements (MMMSS)**
- **Believe in ourselves**
- **Find ways of enjoying what we do**

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THANK YOU

No office hours, but...

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Podcast: [tinyurl.com/making-tech-better](https://www.tinyurl.com/making-tech-better)