

# Impostor Phenomenon in Academia: Why You're Not Alone and How to Overcome It

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RESEARCH-ARTICLE



## Impostor Phenomenon in Software Engineers

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Feedback



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# Have you ever....

Felt like you **didn't deserve a compliment** for your research because you felt it was probably something “easy”?

**Doubted your success** as a researcher even when you were hired for your job or had some research success?

Felt that where you are today is due to **luck** and that someday you will be “found out” that you don't know as much as you should?

Do you tend to be hard on yourself when you make **mistakes or need help**?

# Impostor Phenomenon refers to...

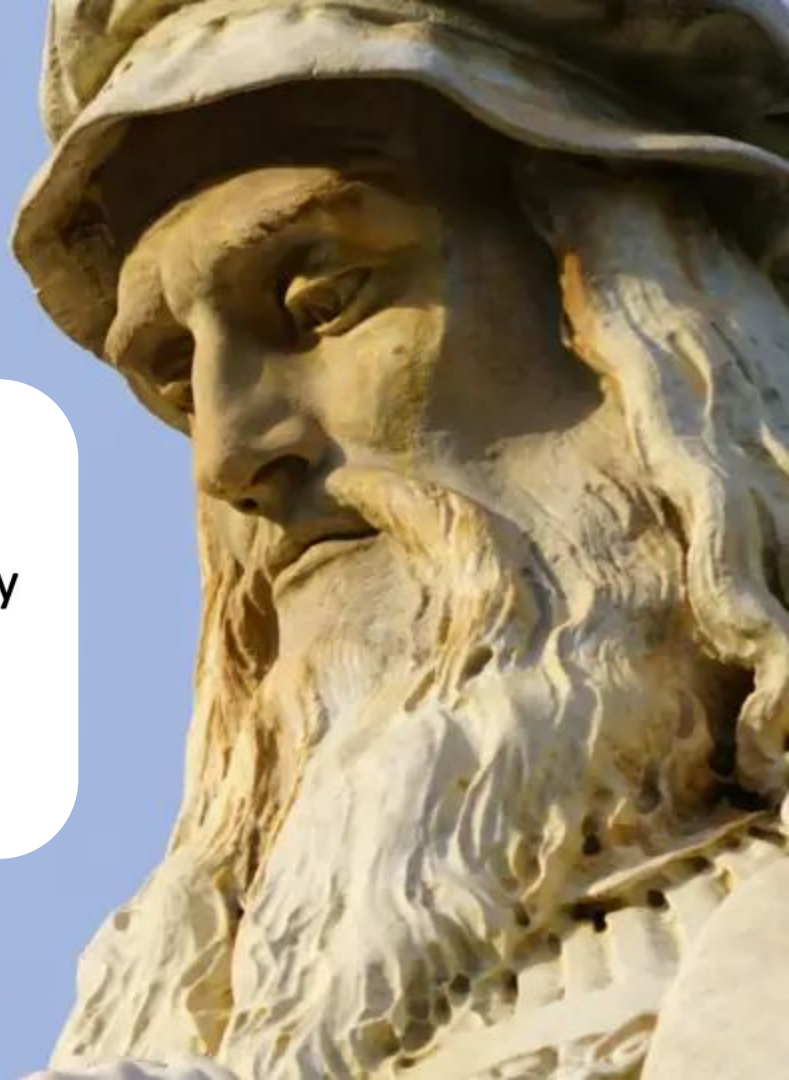
A persistent feeling in high-achieving individuals that they are not good enough, that others overestimate their abilities, and that they will eventually be exposed as a fraud





I have offended God and mankind  
because my work didn't reach the quality  
it should have.

— Leonardo da Vinci



# Clance IP Scale

- 1985: Impostor Phenomenon Scale (CIPS) developed by Dr. Pauline Clance
- 20-item self-report, 1-5 Likert scale
- Scores range from 20 to 100
- Measures fear of evaluation & failure, guilt of success, self vs others' perception
- Widely used in research & practice



<https://paulineroseclance.com/pdf/IPTestandscoreing.pdf>



# Imposter Phenomenon

<https://paulinerosecclance.com/pdf/IPTestandscoreing.pdf>

Join at menti.com | use code 2474 9849



**Moderate**

between  
41 - 60

**Frequent**

between  
61 e 80

**Few**

Less than  
40

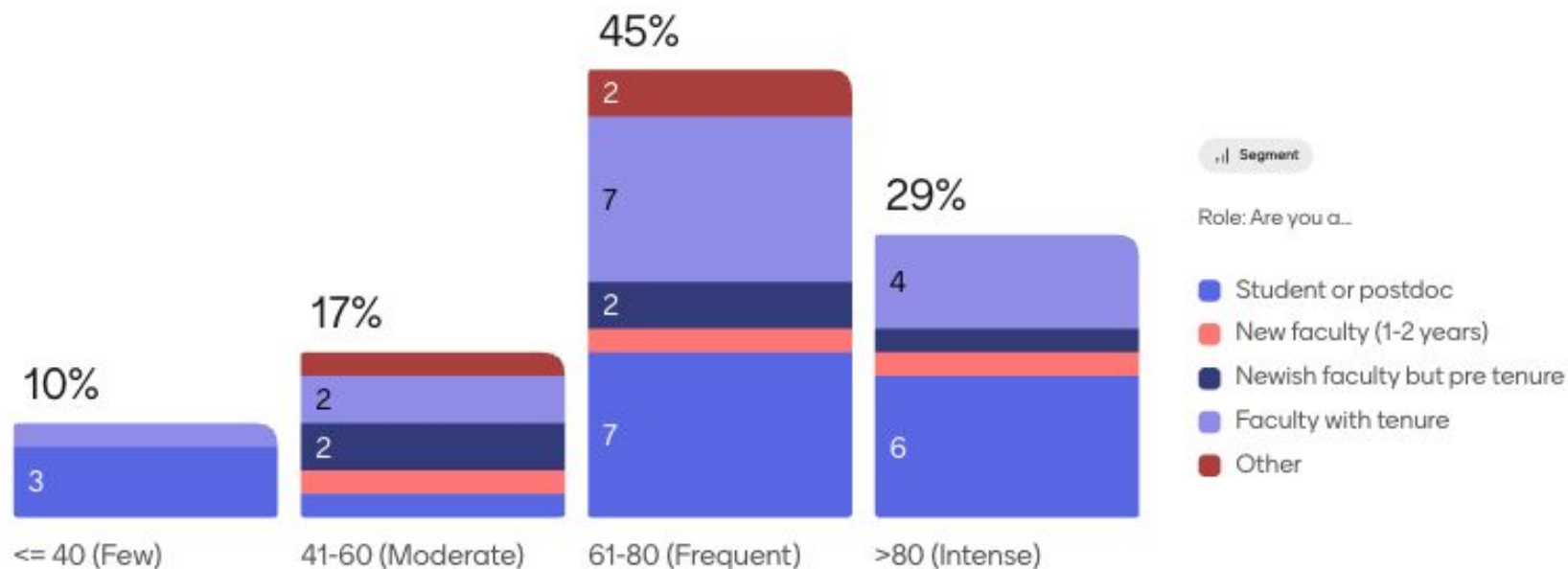
**Intense**

Higher  
than 80

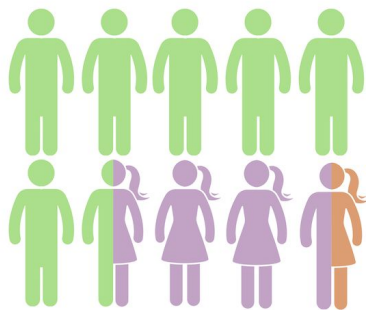


Results from this online survey in the  
symposium!

IP Test: After taking the Impostor Test (scan qr code), add together the numbers of the responses to each statement.



# Results from Paloma's study with software professionals



Percentage of respondents

- Men ■ 67.7%
- Women ■ 30.1%
- Others ■ 2.2%

**52.72%**  
SOFTWARE  
PROFESSIONALS  
SUFFERING FROM IP

**624**  
ANSWERS

**26**  
COUNTRIES

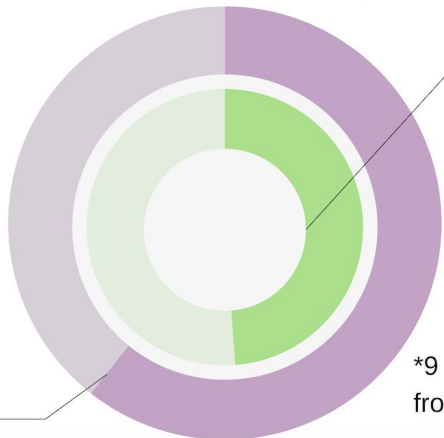


- White \_\_\_\_\_ 50.0%
- Black \_\_\_\_\_ 65.1%
- Asian \_\_\_\_\_ 67.8%
- Others \_\_\_\_\_ 58.4%

Underrepresented groups experience higher levels of Impostor Phenomenon. However, white individuals also face significant impacts.

**60.6%**

Percentage of women suffering from the Impostor Phenomenon



**48.8%**

**Percentage of men suffering from the Impostor Phenomenon**

\*9 in 14 from other genders suffer from IP.

87%

Black

Women

Software Engineer

Historical marginalization and systemic exclusion in the computing field likely play a significant role in this disparity.

This is not decorated.  
Discrimination never is.

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## Impostor Phenomenon Among Software Engineers: Investigating Gender Differences and Well-Being

**Who** *Paloma Guenes, Rafael Tomaz, Bianca Trinkenreich, Maria Teresa Baldassarre, Margaret-Anne Storey, Marcos Kalinowski*

**Track** [GE@ICSE 2025 Gender Equality](#)

# **Triggers** of Impostor Phenomenon for Faculty

- There are often **spikes** in the phenomenon feeling
- **Childhood** and **culture, identity**
- It starts when you are a **student**, and gets worse when you start a position
- **Research expertise** (questions, talking to colleagues)
- **Not understanding** colleagues' papers or presentations
- Giving **presentations** or scientific writing
- Working on **too many projects**
- **Rejected papers/grants** (especially those with non constructive feedback!)
- **Teaching** (no training)
- Negative academic **environment** (hypercompetitive, microaggressions)
- **Comparing** oneself to others
- **Uncertainty** and **evaluation** (for promotion/awards etc)
- **Being recognized** publicly

# Why this matters...

Individuals with IP report lower levels of subjective **well-being and mental health** (depression, stress, anxiety, burnout, relationship issues)

Impacts negatively **productivity**, and career **progression**

Steals your **joy**...

## What ***can you do*** to overcome self-doubt and embrace success?

- Be **aware**, but don't let the mask define you → talk with others about it
- Focus on facts, and revisit your achievements - **own your successes**  
(craft your CV on your terms, see Michele's CV!)
- Set **realistic goals**!
- **Fake it till you make it** but you don't need to know everything to be competent
- Find **mentors, peers** and promote a **culture** that combats impostor phenomenon
- See **failure as part of learning**, not proof of inadequacy



# What ***can we*** do to support those we work with?

- **Support others** - consider their **gender and race, and socioeconomic background/abilities**
- **Normalize failure and celebrate success**
- **Create environments** that don't lead to IP (how can we be more like Sweden)
- Coach your **students** about IP
- Our **words** and the small things we do matter
- Don't be a **bystander**

# Some personal advice

- Be careful with choosing **students**, choose students that want to work with **you**
- Have **templates for saying no**  
(+1 for the idea to mark the bullets you dodged in your calendar as a reward, thanks Shane McIntosh for this idea!)
- **Choose collaborators** that lift you up
- **Don't sell your soul** for papers or funding
- **Don't try your best** (it gives you an excuse for not succeeding :) )
- Seek worklife balance and identity outside work (but recognize that **work can bring us flow** experiences that we may not experience otherwise, as well as friends)
- Spend time trying to **manage feelings of being an impostor** - it takes way too much energy otherwise
- My favourite advice is this...

*“The brick walls are there for a reason. The brick walls are not there to keep us out. The brick walls are there to give us a chance to show how badly we want something. Because the brick walls are there to stop the people who don’t want it badly enough. They’re there to stop the other people.”*

**— Randy Pausch, The Last Lecture**



Thanks for listening!

Please take our survey - later you can see how you compare to others in our community! Please email Paloma Guenes for a link! [palomaguenes@gmail.com](mailto:palomaguenes@gmail.com)

Thanks to my collaborators Paloma, Marcos, Teresa, Rafael, Bianca and Alexander - they contributed to this research and to these slides!

And thanks to my mentors and peers and friends for helping me along the way!