

# How to Get a PhD (and Still Enjoy the Journey)

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Marco Vieira

*marco.vieira@charlotte.edu*



# Who Am I?

Professor at the University of North Carolina at Charlotte

- Previously at the University of Coimbra

PhD in Informatics Engineering from the University of Coimbra

Over 250 published papers in the fields of secure and dependable software systems

Long-time mentor of doctoral students from around the world

- Current (16?) and concluded (19) PhD students on my web page

Passionate about helping PhD students not just finish...

... but grow into independent scholars who enjoy the journey



# The PhD as a Journey

A PhD is both an intellectual mission and a personal transformation

Many students begin with clear plans and confident goals...

... then discover that progress is rarely linear...

Moments of doubt and discovery shape who you become more than any paper or experiment

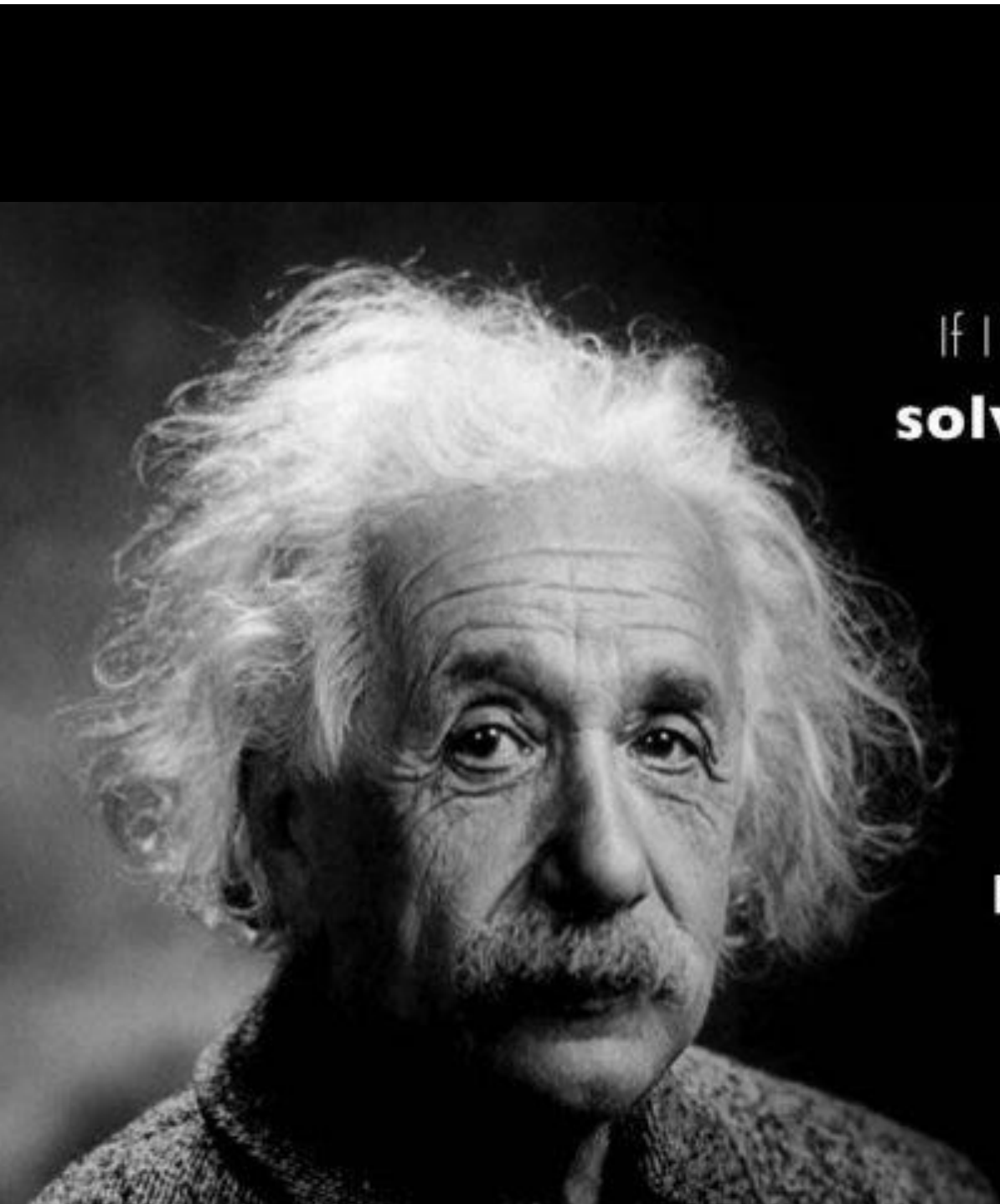
Starting from the end:

every path looks different, and that's okay

growth often comes from discomfort

resilience and curiosity outweigh raw brilliance





If I had an hour to  
**solve a problem** and my  
**life depended** on it,

I would use the  
first 55 minutes  
determining the  
**proper questions to ask.**

*Albert Einstein*

# Asking the Right Questions

The heart of research is not answers, but questions!

Great researchers are defined by the questions they pursue

Good questions evolve; they sharpen as your understanding deepens

Curiosity, not certainty, drives discovery

Reframing your research problem can reignite motivation and purpose

✨ **Curiosity-driven research sustains motivation**





# Selecting a Research Direction

Find a research direction that is exciting, doable, and meaningful!

Run the “3 Ps” test

*Passion*: does it genuinely excite me?

*Practicality*: do I have the tools, skills, and data to pursue it?

*Potential*: will it matter to science, industry, or society?

✨ **When curiosity meets feasibility and impact, you find a research path that’s both sustainable and fulfilling**





# Navigating Setbacks and Rejections

Normalize rejection, everyone faces it!

Treat feedback as data, not judgment: use it to learn, not to label yourself

Build resilience rituals:

- pause to learn from the experience

- talk it out, share perspectives

- see failure as iteration, not identity

✨ **Rejection isn't the opposite of progress; it's part of it**





# Building Relationships

Networks are the foundation for your PhD and for your future

Co-create a productive supervisor/student dynamic:

set mutual expectations early

communicate regularly and transparently

treat supervision as a partnership, not a hierarchy

✨ Schedule periodic “expectation check-ins” with your advisor;  
alignment prevents frustration



# Building Relationships

Different perspectives spark innovation; embrace them

Peer mentoring & collaboration:

learn across disciplines and cultures

share drafts, code, and feedback; grow together

support each other through the highs and lows

✨ **Keep building your network; the collaborations you start now will shape your future career**





# Enjoying the Journey

The emotional landscape of the PhD: confusion → curiosity → clarity

Joy comes from the process, not progress alone:

- celebrate small wins

- embrace detours; they often lead to discovery

Balance matters:

- personal well-being is intellectual fuel

- rest, relationships, and reflection sustain creativity

✨ **You're not just earning a PhD; you're becoming a researcher**



# Lessons from Many Journeys

Ask better questions

Balance curiosity, feasibility, and impact

Embrace rejection

Build strong relationships

Enjoy the journey

**The PhD isn't just about discovering new knowledge; it's about discovering who you are as a scholar!**





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