

# CAREER: Belief Formation in Verification Strategies

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2019 NSF EDSE Workshop

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Grado Department of Industrial & Systems Engineering



**VIRGINIA TECH**<sup>TM</sup>

What is the **HARDEST** thing **engineers** do?

# What is the HARDEST thing engineers do?

James D. Ayers  
Bernard C. Marwick  
Daniel Kottke  
Betsy Carl  
Andy Gagnon  
Walt  
Bruce Horn  
Andy Skitzfeld  
Angela L.  
Hap Horn  
M.E. McCannan  
Burrill Smith  
Jef Raskin

Steve Jobs  
Bill Fernandez  
Don Demman  
Tath King  
David H. Raskin  
Tom W. Madsen  
Matt Carter  
Robert J. Oakleyville  
Larry Kenyon  
Marty Walsh  
Colore Oakland  
Lance Pidel  
Randy Wagoner  
Linda Wilkins  
Mike Boich  
Michael Murray

Alvin  
Bill  
Carmen

August 11th  
Roger Alejo  
Pamela  
Sigmundskrad  
Benjamin  
Erickson

END

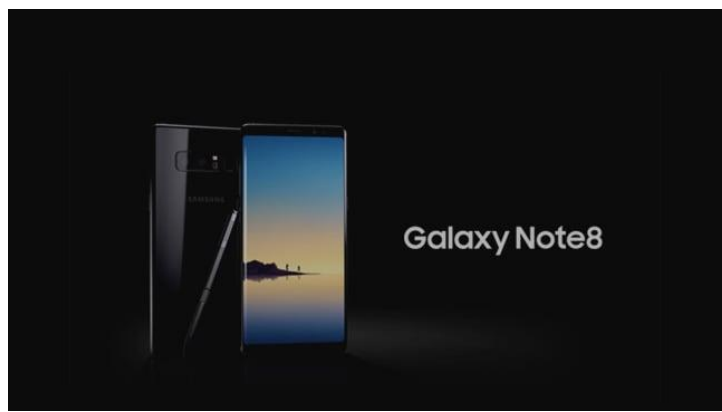
FEBRUARY 10, 1982

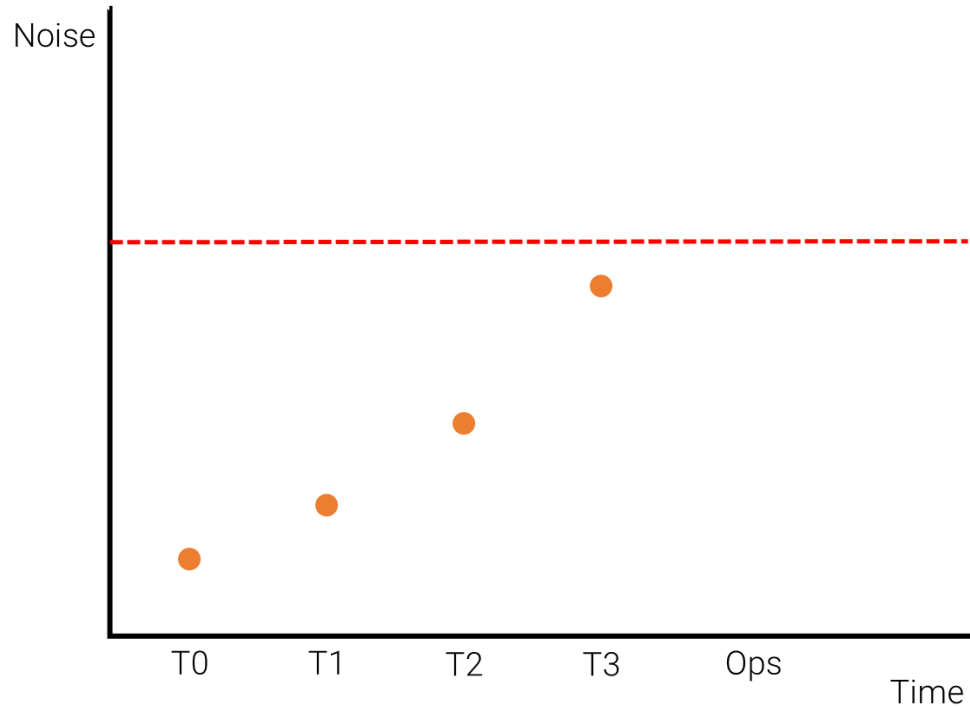
# What is the HARDEST thing engineers do?

Handwritten signatures and names:

- Jimmie D. Ayers
- Fernando C. Marwick
- Daniel Kottke
- Bruce Carl
- Andy Johnson
- Andy Johnson
- Bill Atkinson
- Nick Millidge
- Bruce Horn
- George Ann
- Rob Holt
- Andy Skitzfeld
- Angela L.
- END
- HAP Horn
- M.E. McCannan
- Burrill Smith
- Jeff Raskin
- Luigi Stillo III
- Roger Alejo
- Ravi Suresh
- Steven Jobs
- Chris Holton
- Jean Wall
- Larry Kenyon
- Mathias Nahlik
- Colson Oakland
- Lance J. Pridel
- Mike Boich
- Lynn Sakahachi
- Benjamin L. Pagan
- Bill Fernandez
- Don Demman
- TATH King
- David H. Raskin
- David W. Maheshwari
- Matt Carter
- Robert J. Oakleyville
- Randy Wigginton
- Sandra Wilkins
- Michael Murray

FEBRUARY 10, 1982



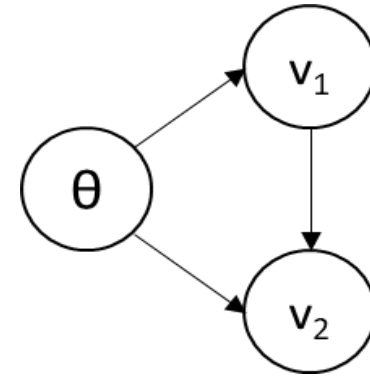
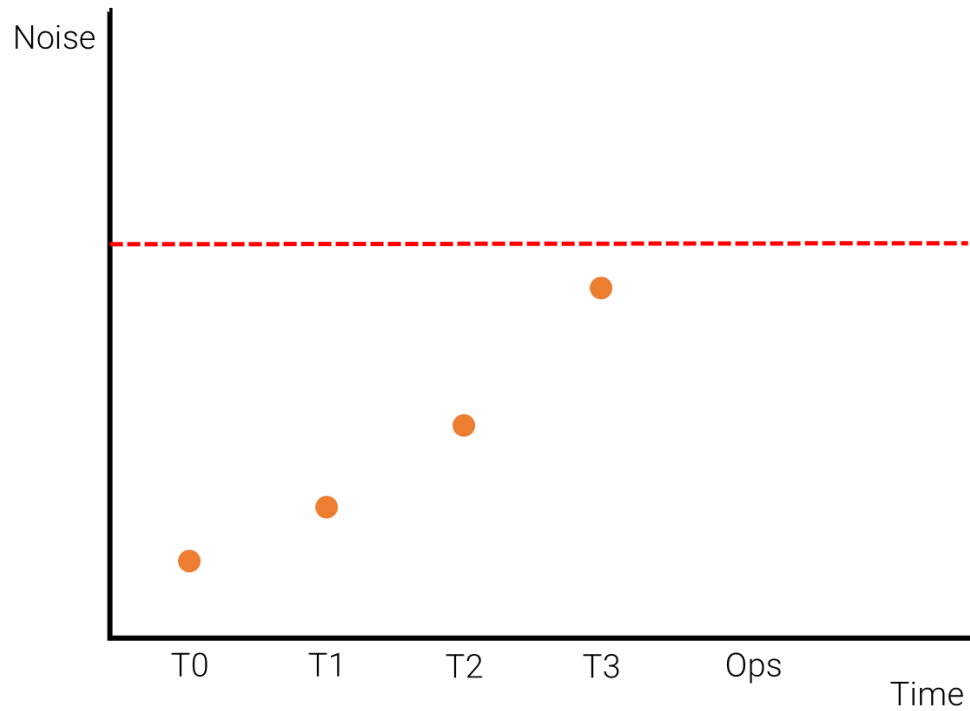


OBJECTIVE DATA



SUBJECTIVE BELIEF

Go, or no-go?

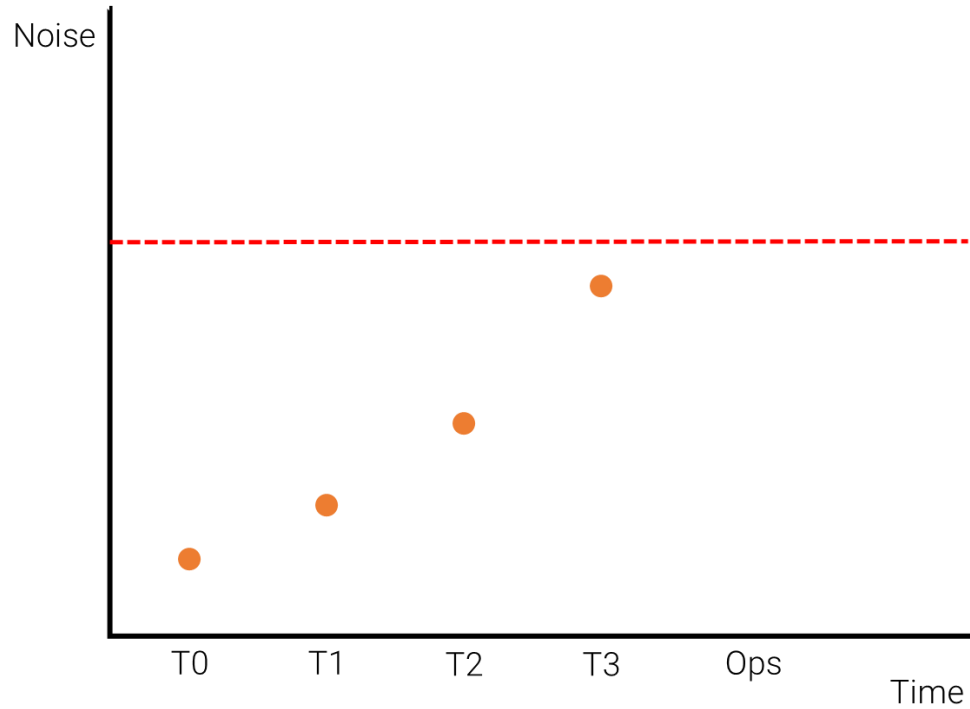


OBJECTIVE DATA



SUBJECTIVE BELIEF

Go, or no-go?

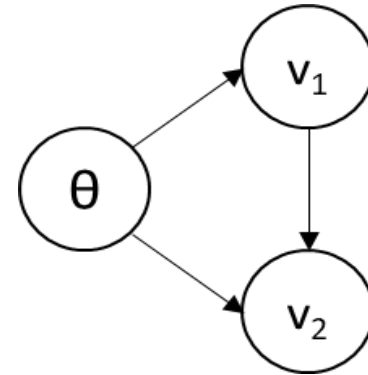


OBJECTIVE DATA



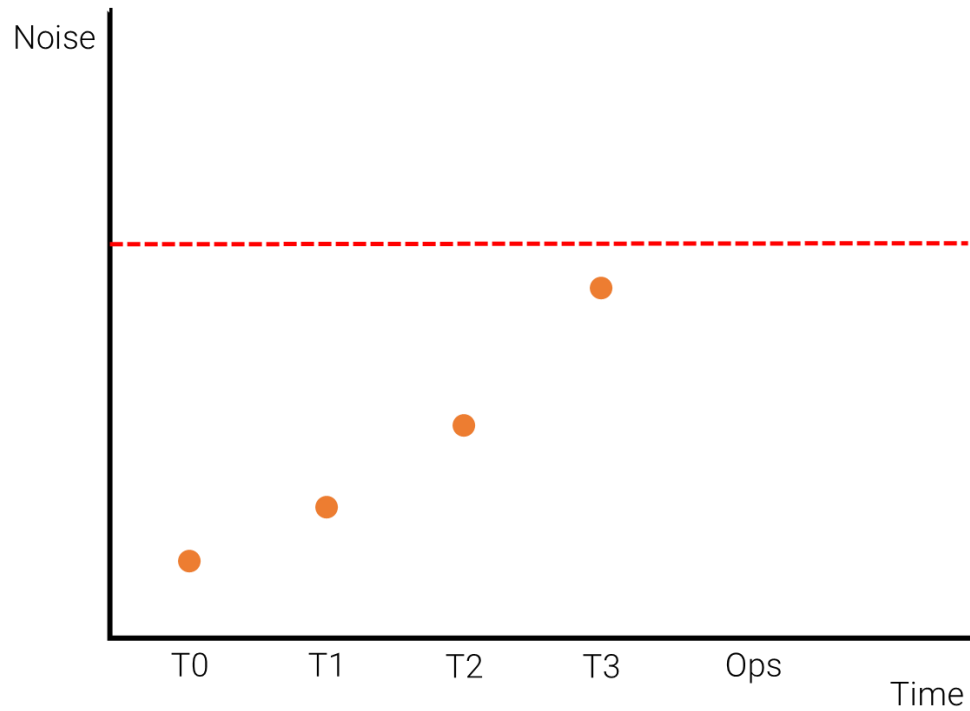
SUBJECTIVE BELIEF

Go, or no-go?



Requirements  
Verification matrices  
Verification reports

...

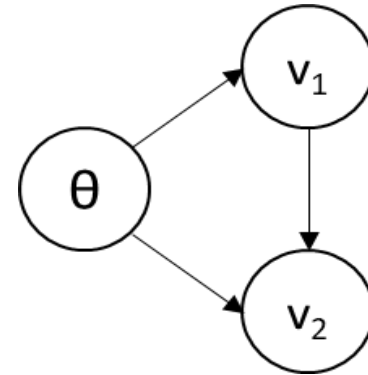


OBJECTIVE DATA



SUBJECTIVE BELIEF

Go, or no-go?

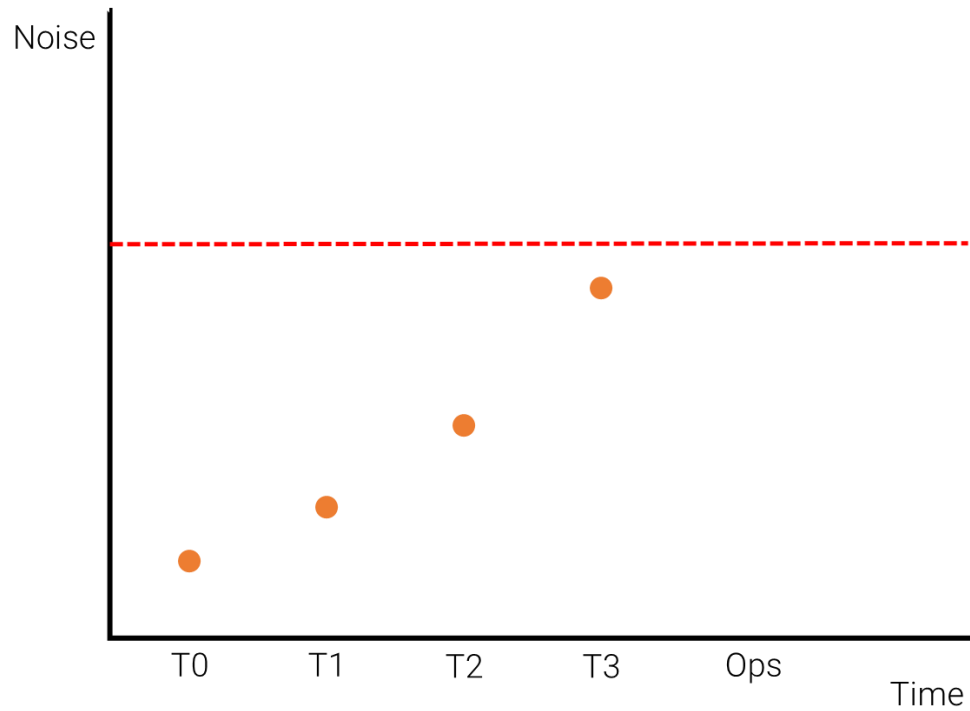


Requirements  
Verification matrices  
Verification reports

...

Direct elicitation



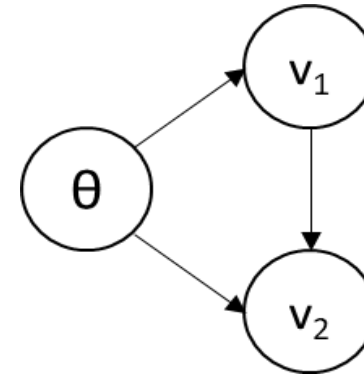


OBJECTIVE DATA



SUBJECTIVE BELIEF

Go, or no-go?



Requirements  
Verification matrices  
Verification reports

...

Direct elicitation

Behavior prediction



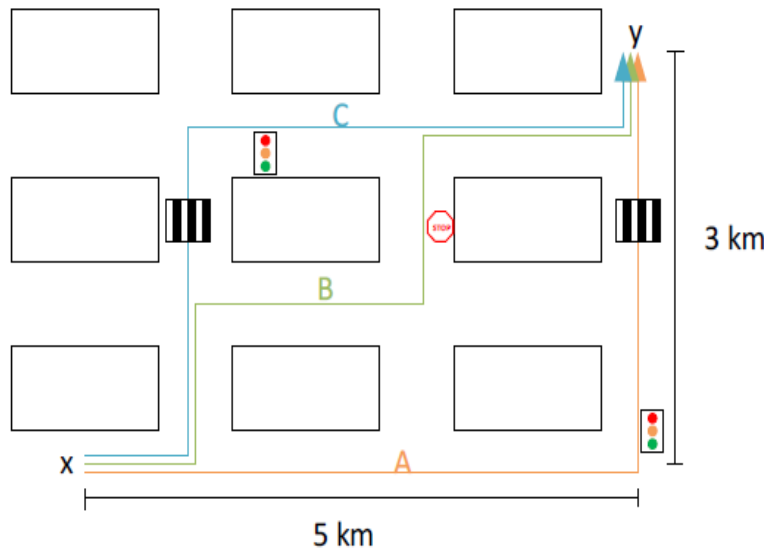
Validity of solution based on elements found in the **contextual** scenario

MIDDLE-SCHOOL



Validity of solution based on elements found in the **contextual** scenario

UNDERGRADUATE



Focus on **breaking** the solution, not on justifying it

# THANK YOU

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