

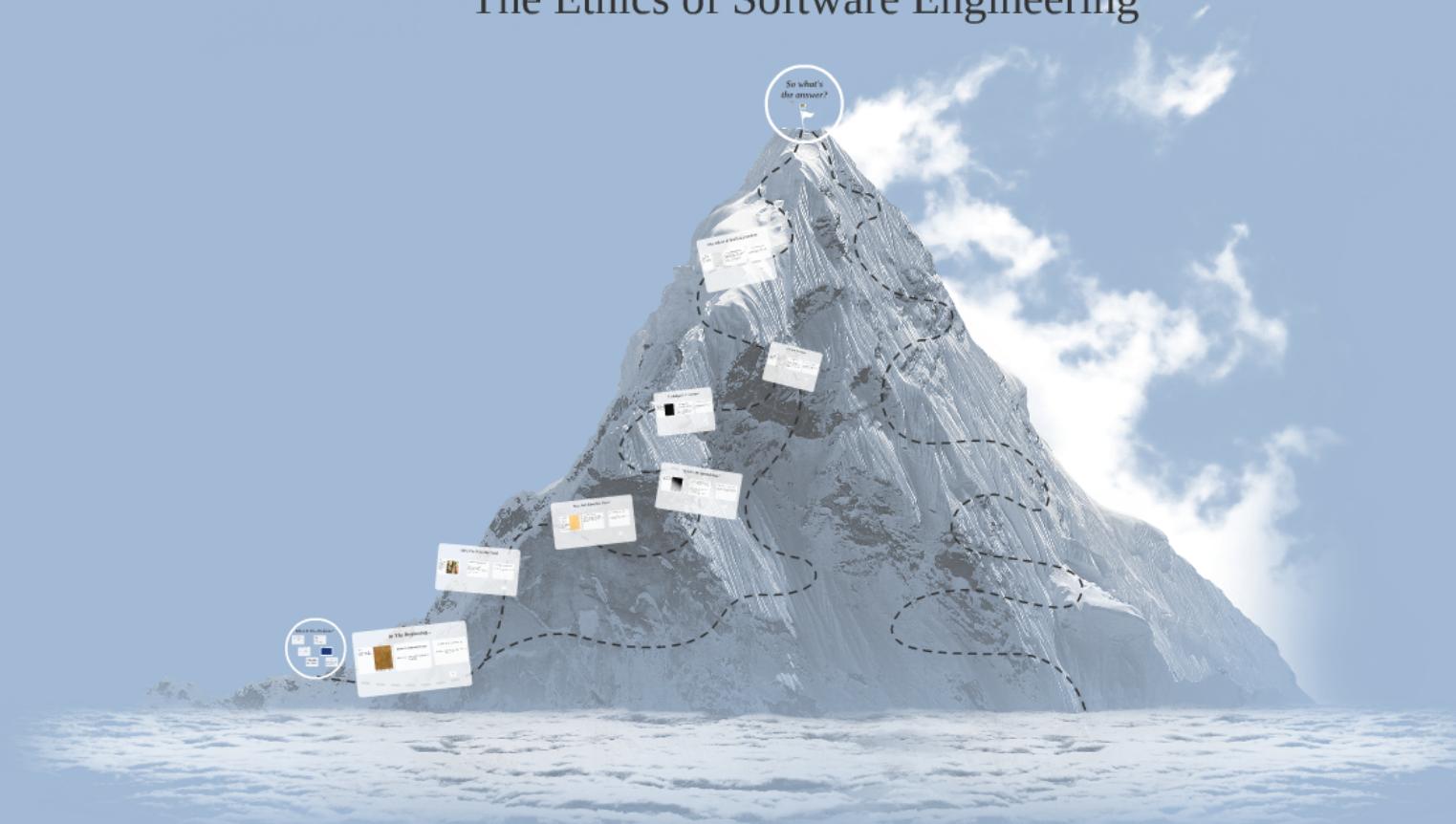
How Would Plato Program?

The Ethics of Software Engineering



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What Is The Problem?

*What does it mean
for a program to be
"good"?*

If you asked -

Bill Gates
Linus Torvalds
Michael Rogers
Donald Knuth
Richard Stallman
Ross Ulbricht

you'd get very different answers.

But why?

People don't just disagree on what is good...

... they disagree on the **definition** of good.

Such a horrible poker hand!



*Luckily, it turns out that another field has been
working on this question for thousands of years!*

Philosophy
- specifically -
Normative Ethics

Normative Ethics

... describe how one ought to act in general - how to discover what is good, how to build a framework for morality. It's not who's "right" or "wrong", but rather, how do we even say what's "right" and "wrong"?

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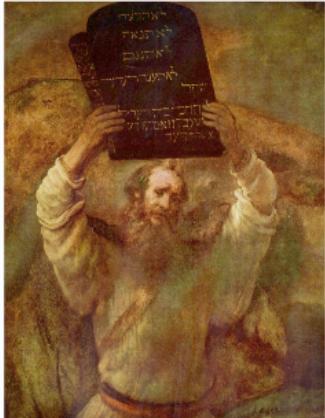
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In The Beginning...

Moses

"Thou shalt not kill."
- Exodus 20:13 (KJV)



"Rembrandt - Moses with the Ten Commandments - Google Art Project" by Rembrandt - kQHDX7s3-DICHA at Google Cultural Institute, zoom level maxresmax. Licensed under Public Domain via Wikimedia Commons

Divine Command Theory

What God (or the gods) tells you to do
is ethical.

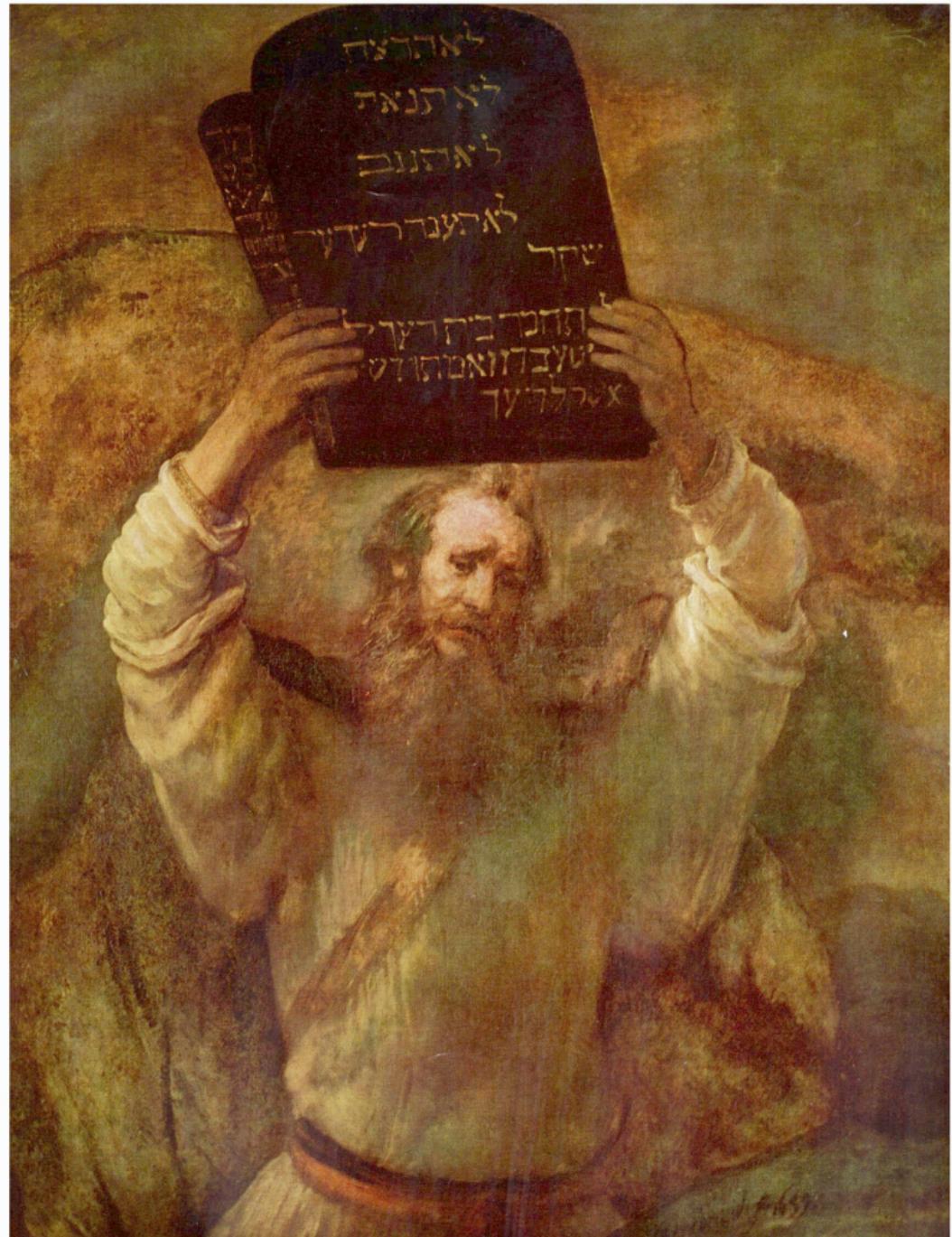
Divine Command Theory of Programming:

A program is good in relationship to how well it meets
its requirements.

Used By
Contracting companies

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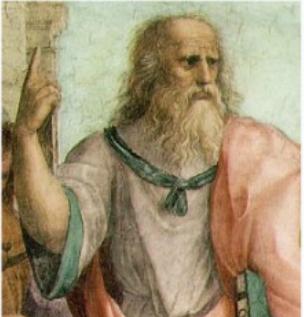
Contracting companies

Only The Wise Do Good

Plato

"No intelligent man believes that anybody ever willingly errs or willingly does base and evil deeds; they are well aware that all who do base and evil things do them unwillingly."

-*Protagoras*



From "The School of Athens" by Raphael. Licensed under Public Domain via Wikimedia Commons

Platonic Ethics (Moral Intellectualism):

Everyone wants to do good.
Evil nevertheless occurs.
Thus, people must not know what is good.

Virtue == knowledge.

Moral Intellectualist Programming Ethics:

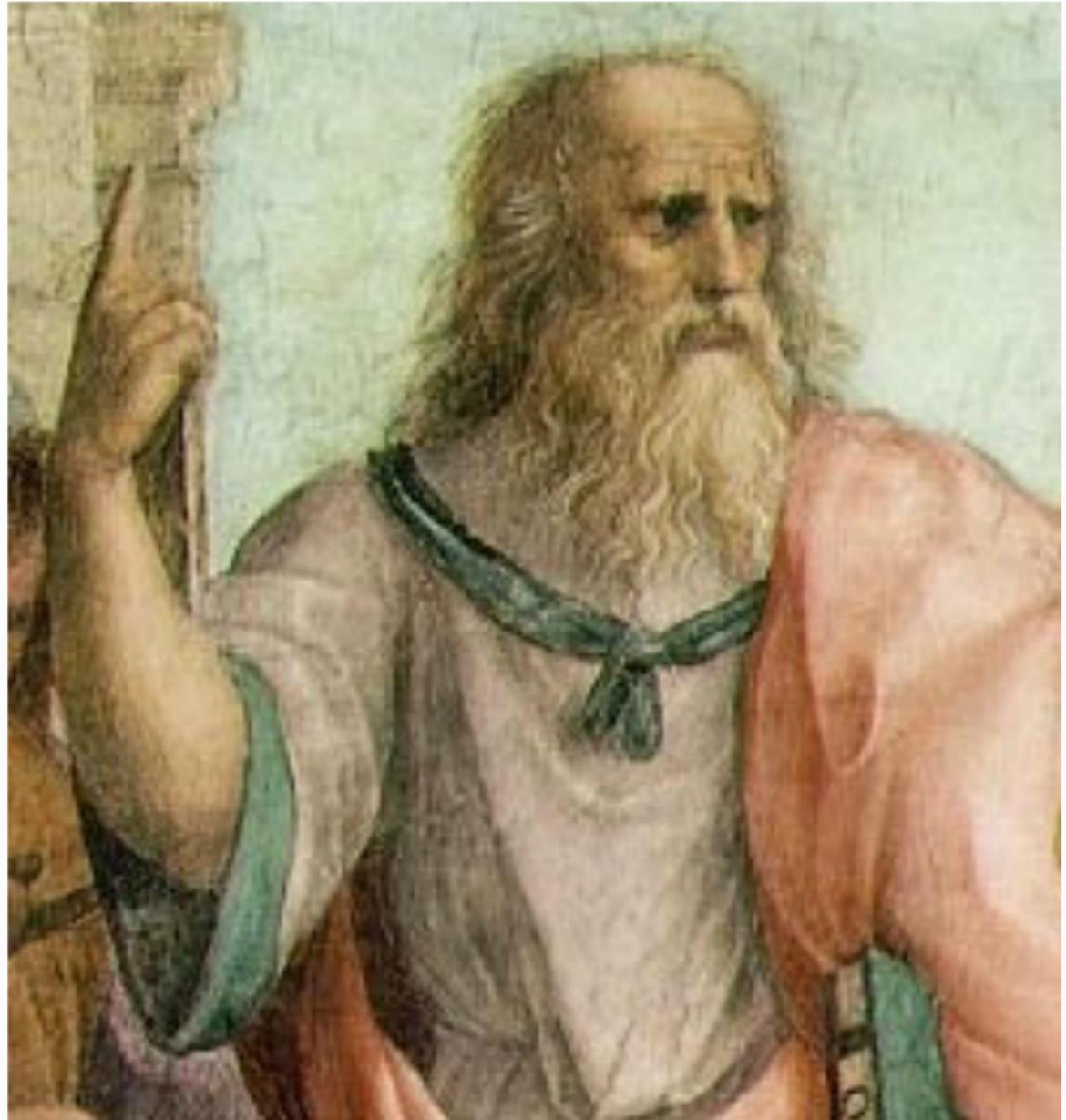
A program is good insofar as it has helped you to learn.

Used By
Students (formal or informal)

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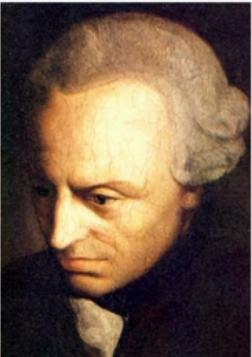
You Just Kant Do That!

Immanuel Kant

The Categorical Imperative:

"Act only according to that maxim whereby you can, at the same time, will that it should become a universal law."

-*Groundwork for the Metaphysics of Morals*



"Immanuel Kant (united portrait)" by unspecified - (Henryk Gąsienicki) portrait.html. Licensed under Public Domain via Wikipedia Commons

Kantian Deontological Ethics

Actions are ethical in so far as they follow the actor's duties, of which the primary ones for Kant are following the Categorical Imperative, and treating people as ends, not means.

Kantian Theory of Programming Ethics

A program is good insofar as it follows universal laws that treat people as ends-in-themselves.

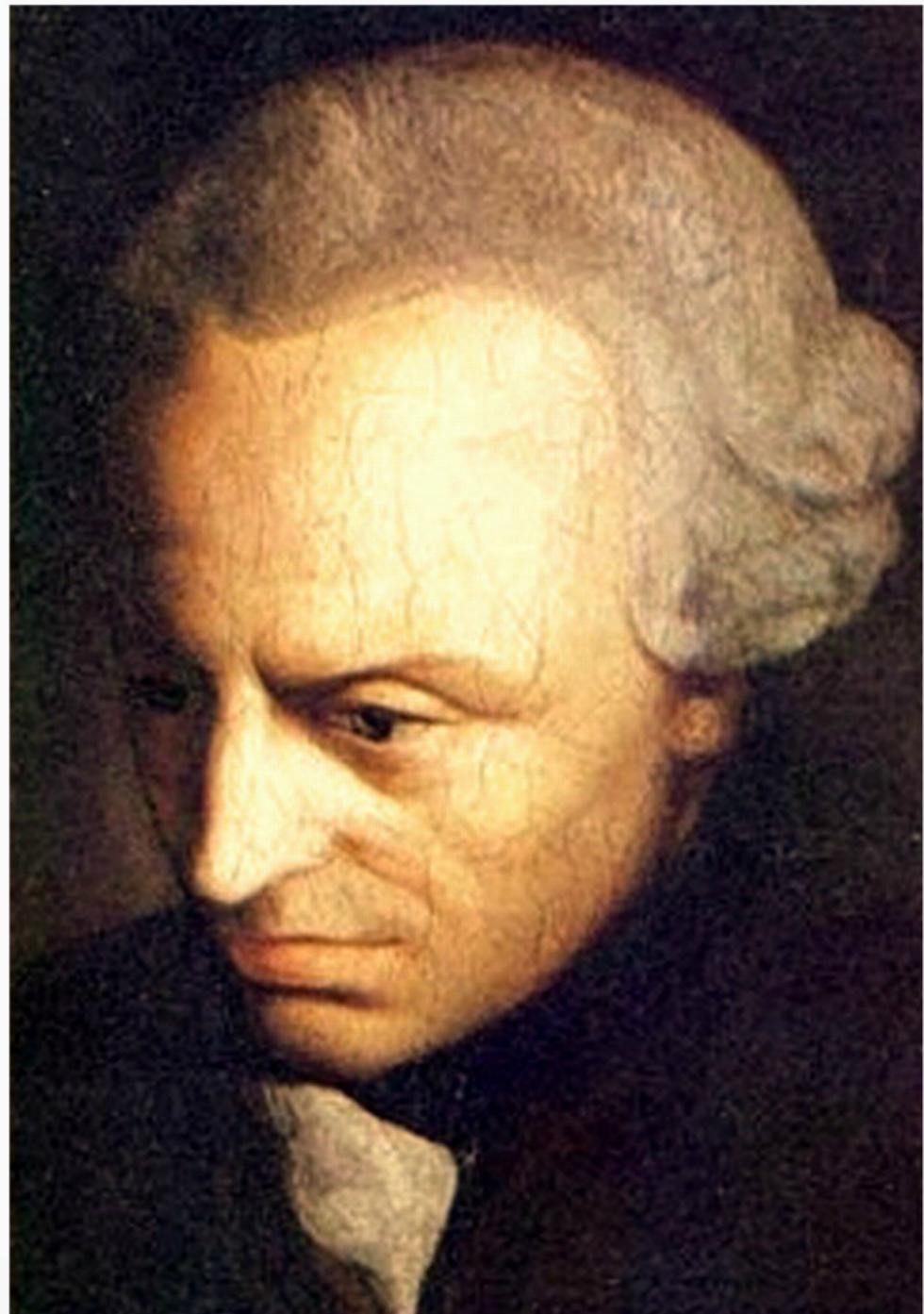
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The Software Foundation

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"Immanuel Kant (painted portrait)" by unspecified - /History/Carnegie/kant/portrait.html. Licensed under Public Domain via Wikimedia Commons

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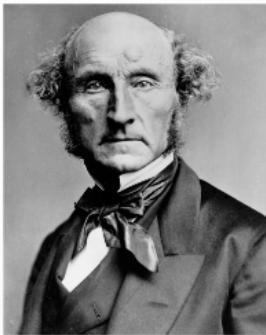
Practiced By:

Free Software Foundation

"Ethics By Spreadsheet"

John Stuart Mill

"[W]hat proof is it possible to give that pleasure is good?"
-Utilitarianism



"John Stuart Mill by London Stereoscopic Company, c1870" by London Stereoscopic Company - British Archives. Licensed under Public Domain via Wikipedia Commons

Utilitarian Ethics - Actions are good insofar as they increase the net happiness of the world. Ethical actions are determined by outcome, not intent.

Spock: Do not grieve, Admiral. It is logical. The needs of the many outweigh...
Kirk: The needs of the few.
Spock: Or the one.
- *Star Trek II : The Search for Spock*

Utilitarian Theory of Programming Ethics

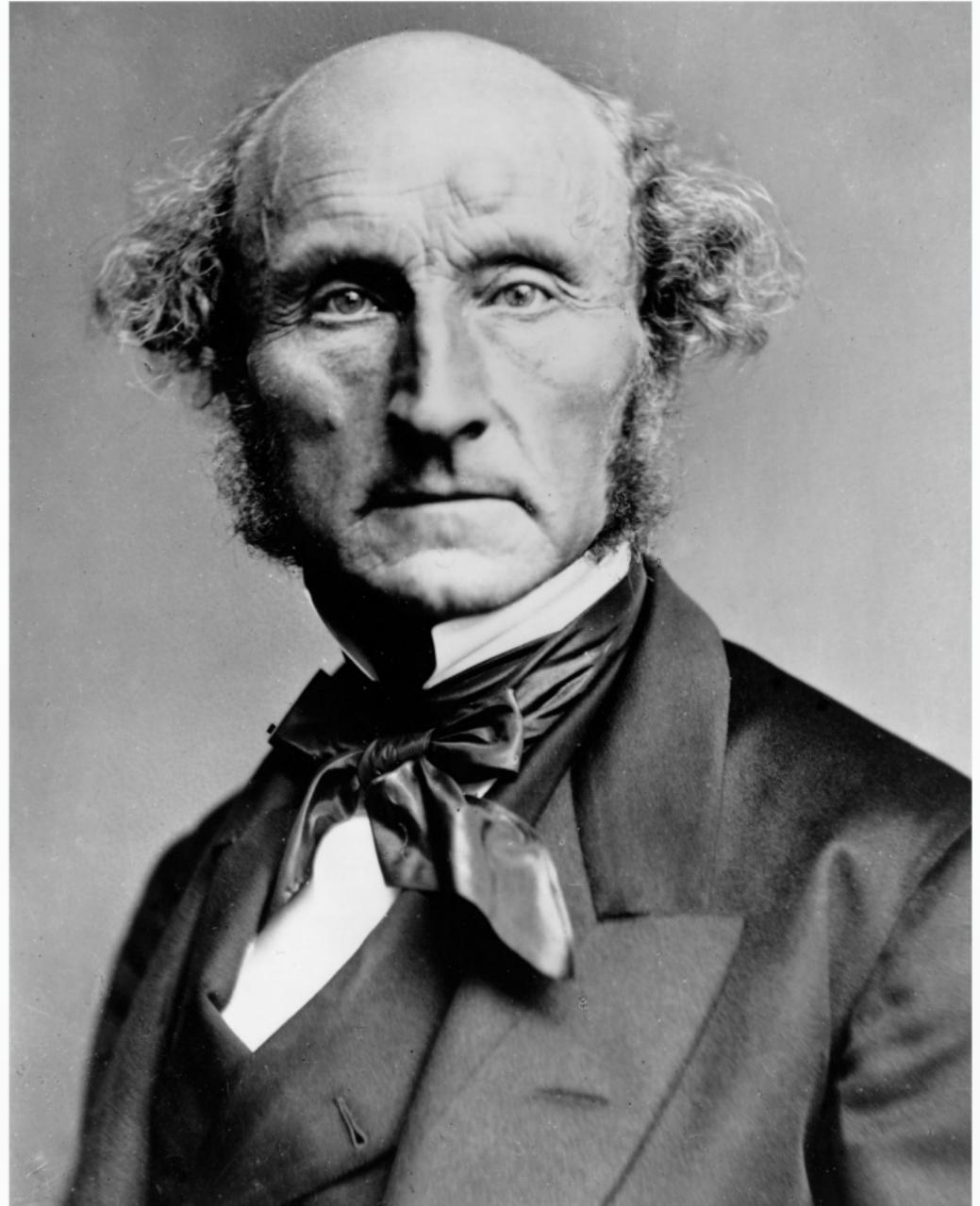
A program is good insofar as its production increases the net happiness of the world.

Used By:
(Some) Artificial intelligence
Open-source developers

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Utilitarian Theory of Programming Ethics

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Used By:

(Some) flexible companies
Open-source developers

L'éthique? C'est moi.

Niccolo Machiavelli

"[A]ll armed prophets
have been victorious, and
all unarmed prophets
have been destroyed."
-The Prince



Portrait of Niccolò Machiavelli by Santi di Tito - cropped and enhanced from a book cover found on Google Images. Licensed under Public Domain via Wikipedia Commons

Machiavellian Ethics

The ends justify the means - personal morality is irrelevant when it comes to the needs of the State.

Ethics comes from following the law. The sovereign government creates the laws, thus the government is itself above ethics. Anything it does to maintain power is thus "ethical".

Machiavellian Theory of Programming Ethics

A program is good insofar as it strengthens and maintains the existing political power structure.

Used By:
Generational Agency
Prestige Countries

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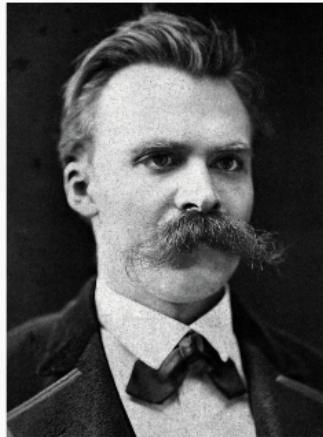
Governmental Agencies
Defense Contractors

The Will To Power

Friedrich Nietzsche

"What is good? All that heightens the feeling of power in man, the will to power, power itself. What is bad? All that is born of weakness."

-*The Antichrist*



"Nietzsche" by F. Hartmann - Photography by F. Hartmann in Basel Public domain due to age of photograph. Scan processed by Ateneo (2003). Licensed under Public Domain via Wikipedia Commons .

Nietzschean Ethics

That is good insofar as it makes a person more powerful, which usually means disobeying existing power structures.

Happiness is only a potential byproduct of achieving one's aim.

Nietzschean Programming Ethics

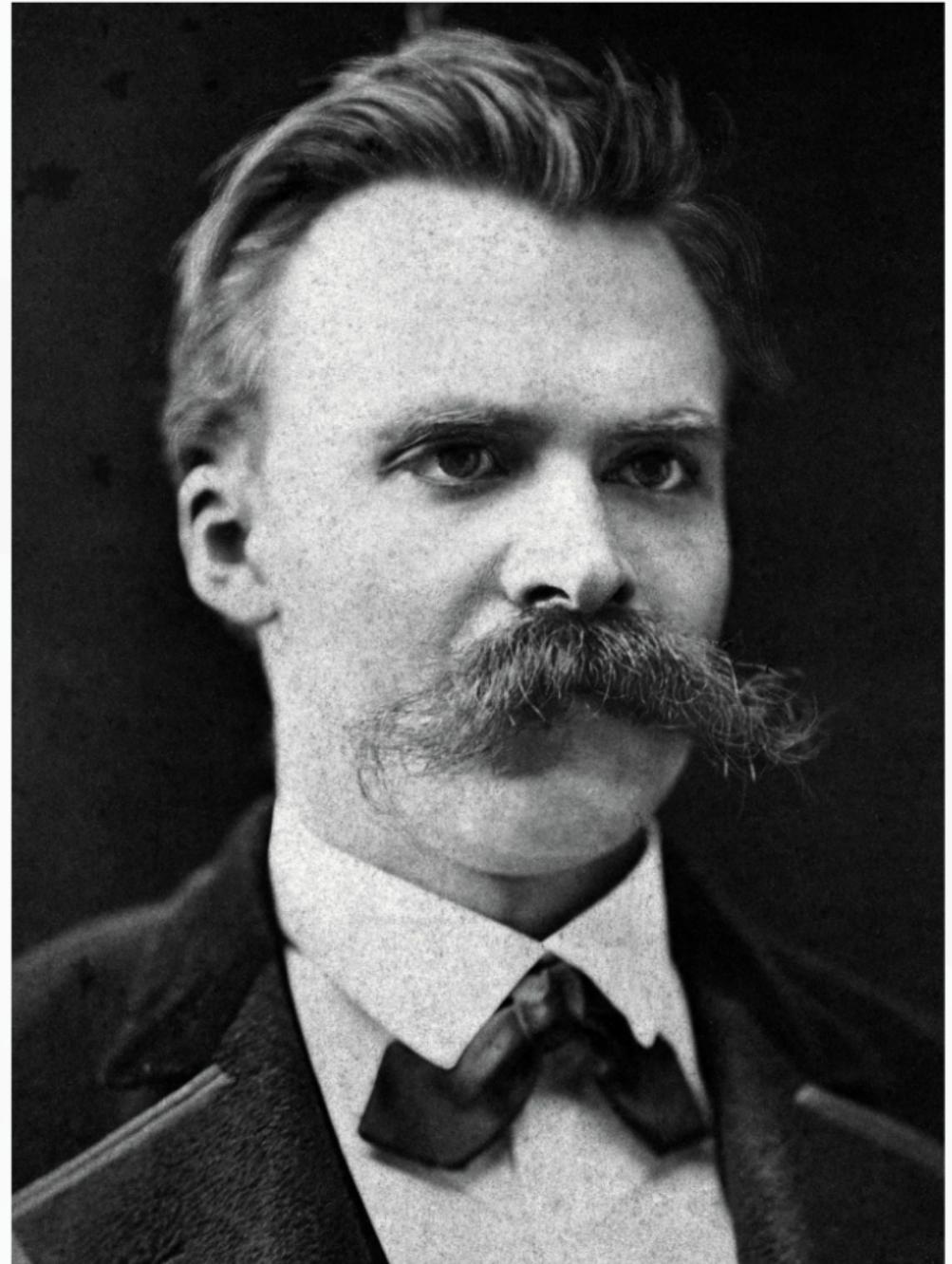
A program is good insofar as it makes you greater in some sense, regardless of its impact on the rest of the world.

Used By:
Malware developers
Molecular Crackers

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Malware developers
Malicious Crackers

The Ethics of Radical Freedom

Jean-Paul Sartre

"I am responsible for everything..."

I am condemned to be free."
-*Being and Nothingness*



"Jean Paul Sartre 1965" by Unknown - [1] Dutch National Archives, The Hague, Fotocollectie Algemeen Nederlands Persbureau (ANP), 1945-1989 beeld in licentie 2.24.01.04 Bestandsnummer 917-9600. Licensed under CC BY-SA 3.0 nl via Wikimedia Commons

Existentialist Ethics

Humanity lives in an absurd world (a world without greater meaning), and it is thus the responsibility of each individual to determine what is "good".

The only taboo is infringing upon others' freedoms to make their own meaning.

Existentialist Programming Ethics

A program is good according insofar as it meets whatever the subjective goals of that program are.

Used By:
Hackers (of the old-school variety)
Programmers in non-commercial
side projects

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So what's the answer?



Ethical Egoism Error Theory Theory of Natural Rights
Expressivism Moral Nihilism State Consequentialism
Stoic Ethics Negative Utilitarianism Non-cognitivism Epicureanism
Negative Consequentialism Feminist Ethics
Virtue Ethics Moral Subjectivism Moral Pragmatism
Antinatalist Ethics Quasi-realism Hedonistic Ethics
Anarchist Ethics Religious Ethics Contractualism Extropian Ethics
Moral Absolutism Cyrenaic Hedonism Ethical Naturalism
Antihumanist Ethics Emotivism Moral Realism
Teleological Ethics Relational Ethics Situation Ethics
Ethical Altruism Moral Absolutism Eudaimonism Role Ethics

"Waste no more time arguing about what a good person should be. Go be one." -Marcus Aurelius



Bill Laboon

@BillLaboon

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