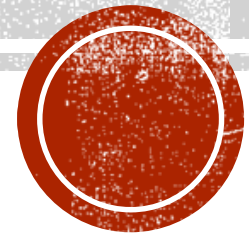


# ABOUT THIS COURSE

BLOCKCHAIN @ SOFTUNI in Partnership with **æternity**

Nicola Evtimov



# BIO

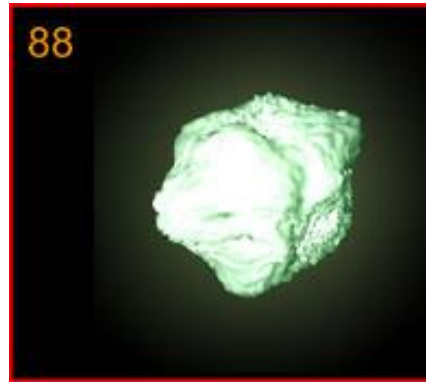
- Bs in Business Administration (Seattle, WA) 2007
  - MSc in Finance and Investment Management (Scotland) 2009
  - Магистър по Физика и Оптометрия (СУ) 2017
- 

- Оптичен Център и Онлайн Оптика (2009-)
  - Евро-проекти в алтернативен туризъм (2011 & 2014) – Вилен Комплекс Никодиа
  - 2 нови Евро-проекта (2017-) в производство и спорт
- 

- Blockchain Investment (2016-)
- Ethereum Mining (2016-2017)



# RADIUM (RA)



- DISCOVERED IN 1898 / ISOLATED IN 1911 BY MARIE CURIE
- Radium is not necessary for living organisms; adverse health effects because of its radioactivity and chemical reactivity
- Derived from Uranium mines and highly radioactive heavy metal
- MASS BELIEF in 1920s:  
Novelty properties like :
  - SUPPOSED CURATIVE POWERS!
  - SHINES IN THE DARK!
  - MULTIPLE USECASES

*“Through the medium of UNDARK, radium serves you SAFELY and SURELY”*



**The Power of Radium at Your Disposal**

Twenty-three years ago radium was unknown. Today, thanks to constant laboratory work, the power of this most unusual of elements is at your disposal. Through the medium of Undark, radium serves you safely and surely.

Does Undark really contain radium? Most assuredly. It is radium, combined in exactly the proper manner with zinc sulphide, which gives Undark its ability to shine continuously in the dark.

Manufacturers have been quick to recognize the value of Undark. They apply it to the dials of watches and clocks, to electric push buttons, to the buckles of bed room slippers, to house numbers, flashlights, compasses, gasoline gauges, autometers and many other articles which you frequently wish to see in the dark.

The next time you fumble for a lighting switch, bark your shins on furniture, wonder vainly what time it is *because of the dark*—remember Undark. *It shines in the dark.* Dealers can supply you with Undarked articles.

For interesting little folder telling of the production of radium and the uses of Undark address

**RADIUM LUMINOUS MATERIAL CORPORATION**  
58 PINE STREET - - - - - NEW YORK CITY  
Factories: Orange, N. J. Mines: Colorado and Utah

**UNDARK**  
*Radium Luminous Material*  
**Shines in the Dark**

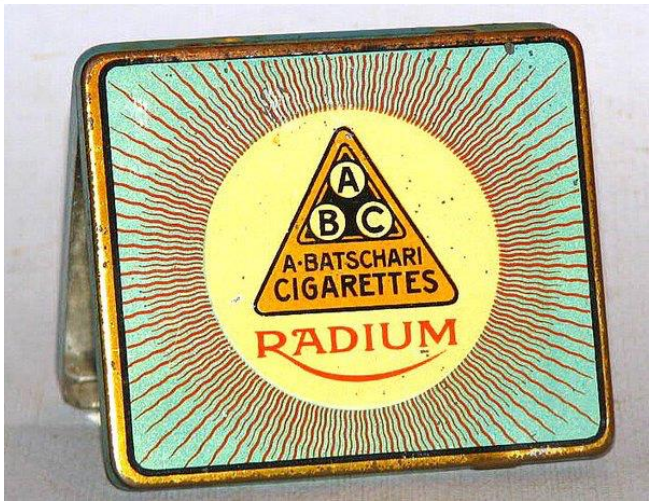
**To Manufacturers**

The number of manufactured articles to which Undark will add increased usefulness is manifold. From a sales standpoint, it has many obvious advantages. We gladly answer inquiries from manufacturers and, when it seems advisable, will carry on experimental work for them. Undark may be applied either at your plant, or at our own.

The application of Undark is simple. It is furnished as a powder, which is mixed with an adhesive. The paste thus formed is painted on with a brush. It adheres firmly to any surface.



# NOVELTIES IN THE 1920S AND NOW..








Market Cap ▾ Trade Volume ▾ Trending ▾ Tools ▾

 Radium (RADS)

\$5.16 (13.09%)

0.00121794 BTC (5.48%)

-  Website
-  Explorer
-  Announcement
-  Rank 161
-  Coin

Market Cap	Volume (24h)
\$17,300,681	\$190,264
4,086 BTC	44.94 BTC

 Charts  Markets  Social  Tools  Historical Data

Radium Charts

Zoom 1d 7d 1m 3m 1y YTD ALL



# UNDERSTANDING THROUGH KNOWLEDGE

The point :

- What we do not understand but trust and take for granted can kill us... financially and apparently physically.
- Do not underestimate the power of group persuasion
- Avoid non-educated decision making process
- Experiment after accumulating a solid foundation of technical and historical awareness
- ONLY ACHIEVABLE BY LEARNING, BEING CURIOUS AND OPENMINDED!

“When scientists discovered Radium they hardly dreamed they had unearthed a revolutionary “Beauty Secret.” “Radior” Chin straps are guaranteed to contain Radio-active substance and Radium Bromide.”



# WHAY IS THIS?

```
#!/usr/bin/env python
"""
Generate an ECDSA keypair and Bitcoin-compatible payment address.
Requires Brian Warner's excellent python-ecdsa library.
http://github.com/aristus/bitcoin-printer
"""
from ecdsa.ecdsa import Public_key, int_to_string
from ecdsa.ellipticcurve import CurveFp, Point
from binascii import hexlify
import hashlib
riplehash = hashlib.new('ripemd160')

# ***WARNING*** This is possibly insecure! ***WARNING***
from random import SystemRandom
randrange = SystemRandom().randrange

## Bitcoin has an adorable encoding scheme that includes numbers and letters
## but excludes letters which look like numbers, eg "l" and "0"
__b58chars = '123456789ABCDEFGHJKLMNPQRSTUVWXYZabcdefghijkmnopqrstuvwxyz'
__b58base = len(__b58chars)

def b58encode(v):
    long_value = 0L
    for (i, c) in enumerate(v[::-1]):
        long_value += (256**i) * ord(c)
    result = ''
    while long_value >= __b58base:
        div, mod = divmod(long_value, __b58base)
        result = __b58chars[mod] + result
        long_value = div
    result = __b58chars[long_value] + result
    nPad = 0
    for c in v:
        if c == '\0': nPad += 1
        else: break
    return (__b58chars[0]*nPad) + result
```

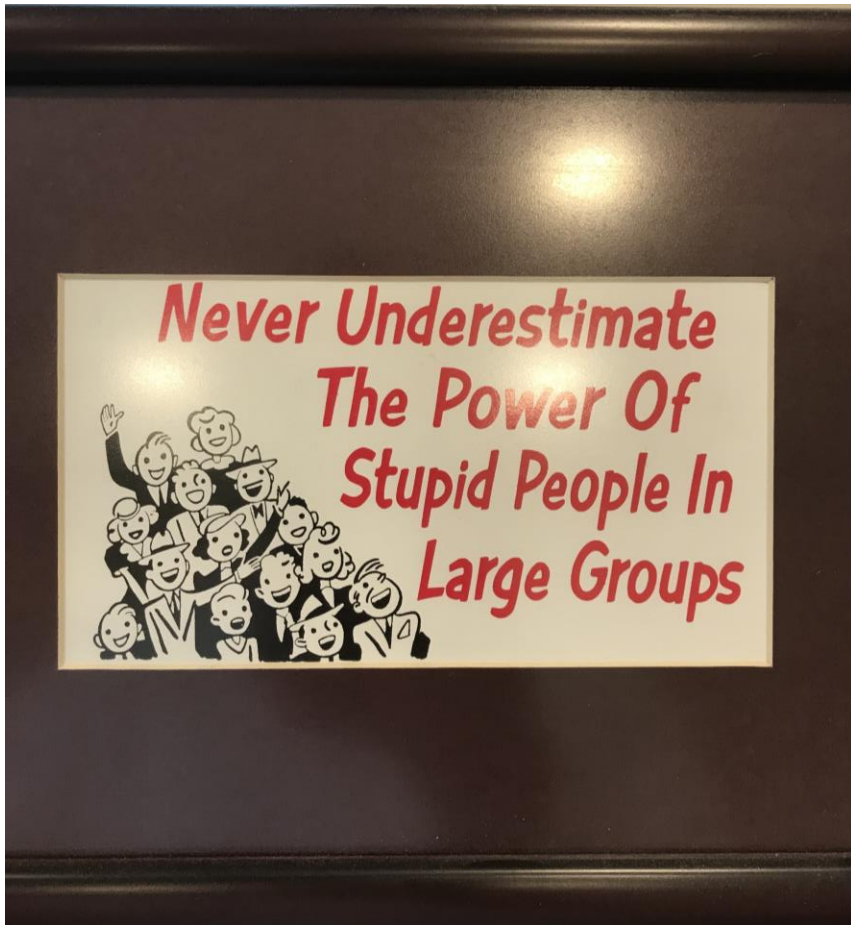
```
def generate_btc_address():
    # secp256k1, not included in stock ecdsa
    _p = 0xFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFEBAAEDCE6AF48A03BBFD25E8CD0364141L
    _r = 0xFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFEBAAEDCE6AF48A03BBFD25E8CD0364141L
    _b = 0x000000000000000000000000000000000000000000000000000000000000007L
    _a = 0x00000000000000000000000000000000000000000000000000000000000000L
    _Gx = 0x79BE667EF9DCBBAC55A06295CE870B07029BFCD2DCE28D959F2815B16F81798L
    _Gy = 0x483ada7726a3c4655da4fbfc0e1108a8fd17b448a68554199c47d08ffb10d4b8L
    curve_256 = CurveFp(_p, _a, _b)
    generator = Point(curve_256, _Gx, _Gy, _r)

    secret = randrange(1, generator.order())
    pubkey = PublicKey(generator, generator * secret)
    step1 = '\x04' + int_to_string(pubkey.point.x()) + \
        int_to_string(pubkey.point.y())
    step2 = hashlib.sha256(step1).digest()
    ripeshash.update(step2)
    step4 = '\x00' + ripeshash.digest()
    step5 = hashlib.sha256(step4).digest()
    step6 = hashlib.sha256(step5).digest()
    chksum = step6[:4]
    addr = step4 + chksum
    addr_58 = b58encode(addr)
    return (
        hex(secret)[2:-1],
        hexlify(step1),
        addr_58
    )
```





# THE POWER OF KNOWLEDGE



Purpose of the Introduction course:

- Understand Crypto Currencies and Tokens
- Grasp the concept of Blockchain
- Awareness of Cryptology
- Invest, Mine, Use, Trade, Hold CCs
- Value ICOs
- Create a community of educated blockchain enthusiasts
- Make an educated guess rather than a gamble with your time and money



# PREMATURE INVESTMENTS?

Questions I have been asked recently:

- I have invested 10,000EUR in Bitcoin and Ether. There are located on Kraken, how can I receive them in Bulgaria?
- Can I transfer Crypto without having internet access?
- Can I put my coins in my bank account?
- How high is bitcoin's price going to go and when do I sell?
- Let's start an ICO, we can collect millions.
- I heard that you can get rich by owning BitcoinTs, where do I invest?





# THE TEAM

## Presenters:

- Nikola Stojanov @ æternity
- Vladi Dramaliev @ æternity
- Zvezdin Besarabov @ Obecto

## Technical Advisors:

George Spasov @LimeLabs

Ivo Gergiev @AdEx

