

# Blockchain @ EA

Electronic Arts Campus, Burnaby, BC

12th April 2018

**Bob Summerwill**

# Who is Bob Summerwill?



- Sony Psygnosis, 1996-1999
- **Electronic Arts, 1999-2014 (15 years+)**
- Kitsilano Software, 2014-2018
- Roadhouse, DeNA, SCEA, 2014
- TD Securities, 2015
- doublethink.co, 2015-2018
- **Ethereum, 2015+**
- Ethereum Foundation, 2016
- ConsenSys 2016-2017
- Enterprise Ethereum Alliance, 2016-2017
- **Sweetbridge, 2017+**
- **Varro Technologies, 2018+**

# Bobliography

- EA Sports UFC Mobile (iOS, Android)
- NHL15 (XBOX One, PS4)
- EA Sports UFC (XBOX One, PS4)
- NHL14 (XBOX360, PS3)
- NHL13 (XBOX360, PS3)
- FIFA11 (PC, XBOX360, PS3)
- FIFA11 Ultimate Team (XBOX360, PS3)
- FIFA10 (XBOX360, PS3)
- FIFA10 Ultimate Team (XBOX360, PS3)
- NASCAR 08 (XBOX360, PS3, PS2)
- Skate (XBOX360, PS3)
- FIFA08 (XBOX360, PS3)
- FIFA07 (XBOX360, PS3)
- FIFA Road to World Cup (XBOX360)
- NBA LIVE 06 (XBOX 360)
- FIFA05 (PC, GC, PS2, XBOX)
- FIFA 2004 (PC, GC, PS2, XBOX)
- Harry Potter and the Chamber of Secrets (PS2)
- Premier League Football Manager 2001 (PC)
- Premier League Football Manager 2000 (PC)



PC GAMING

GUEST

# Blockchain could trigger the game industry's next evolution

J.D. HILDEBRAND JANUARY 31, 2018 3:40 PM



Image Credit: Zapp2Photo / Shutterstock

An advertisement for Microsoft Azure. It features the Microsoft logo and the Azure logo. The text reads: "Virtual machines with virtually unlimited options" and "Start with a \$250 CREDIT for 30 days." A large blue button at the bottom right says "TRY AZURE FREE".

Microsoft Azure

Virtual machines with virtually unlimited options

Start with a \$250 CREDIT for 30 days.

TRY AZURE FREE →

GamesBeat Latest



Fortnite servers down for emergency maintenance



# **Video Game Giant Ubisoft Is Exploring Blockchain Use Cases**

**Nasdaq**

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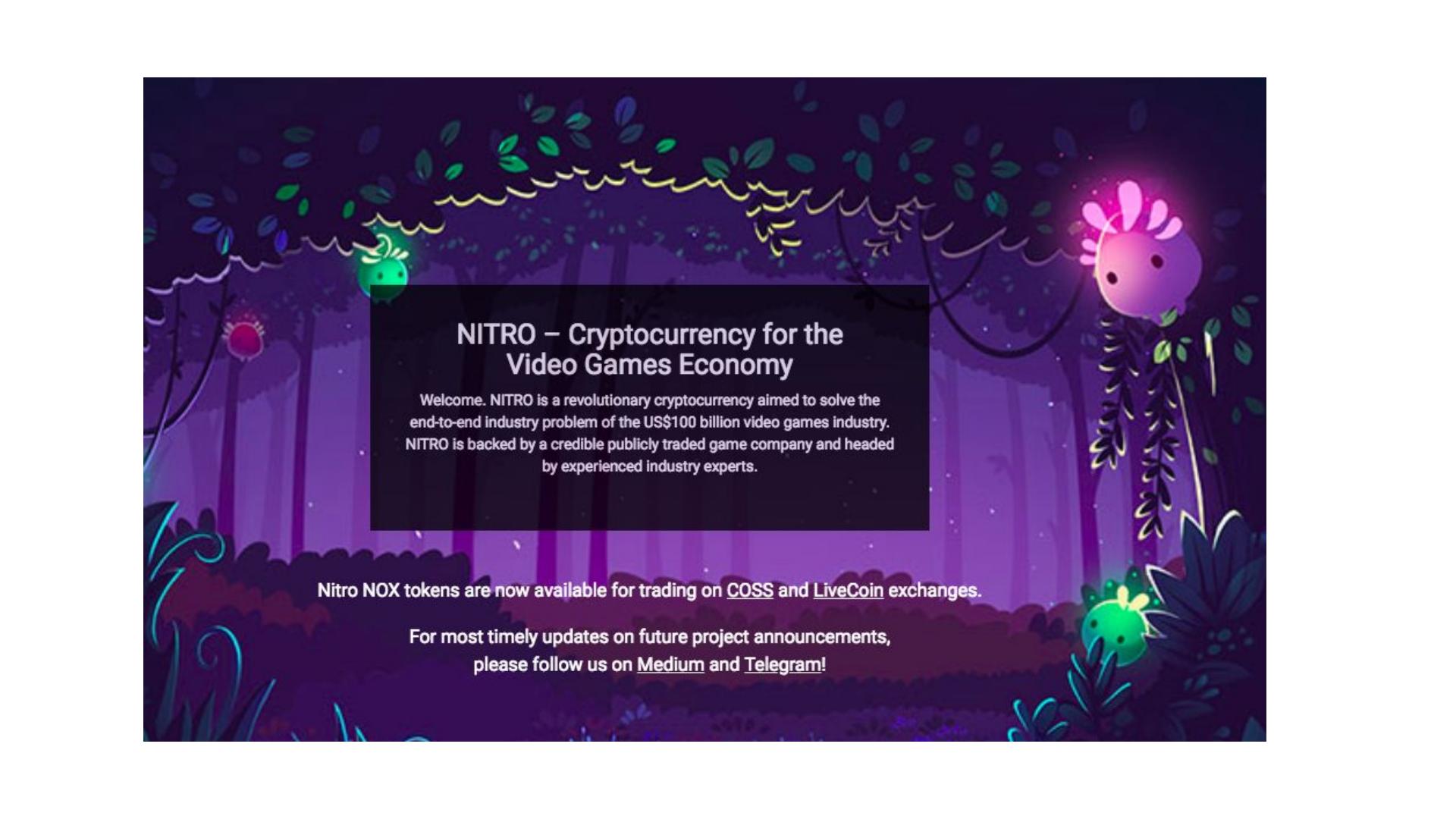


**POWER TO SPARE**  
THE NEW NAVIGATOR

## Using Blockchains to Transform Video Game Economies

March 13, 2018, 01:07:40 PM EDT By Christopher Tozzi, [Distributed](#)





## NITRO – Cryptocurrency for the Video Games Economy

Welcome. NITRO is a revolutionary cryptocurrency aimed to solve the end-to-end industry problem of the US\$100 billion video games industry. NITRO is backed by a credible publicly traded game company and headed by experienced industry experts.

Nitro NOX tokens are now available for trading on [COSS](#) and [LiveCoin](#) exchanges.

For most timely updates on future project announcements,  
please follow us on [Medium](#) and [Telegram](#)!

## Blockchain is games' new tech obsession

Early tech adoption is part of the essence of the games industry - but proposals to integrate blockchain into companies' businesses, not just their games, should give us pause

The tendency to view video games as an entertainment product - part of a spectrum encompassing things like movies, TV shows and music - is an entirely reasonable one. But it can obscure the fact that video games are also often the most advanced, complex and demanding pieces of software that the average consumer will ever use.



**Rob Fahey**  
Contributing Editor  
Thursday 29th March 2018

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# The Irrational Exuberance That is Blockchain

February 21, 2018

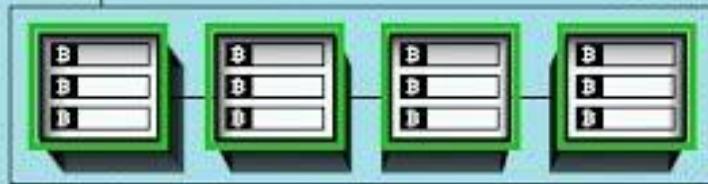
Contributor: Christy Pettey

DIGITAL BUSINESS

**IT leaders must cut through the hype and apply blockchain for maximum benefit.**

The recent rapid rise and fall in the value of Bitcoin has thrust **blockchain** into our everyday vocabulary and into the minds of most **boards and CEOs**. Blockchain promises genuine long-term potential for global-scale transformation of economies and industries which, over time, will lead to the era of the programmable economy, in which value is exchanged peer-to-peer without central authority, and new exchange mechanisms are created by any participant.

## **BLOCKCHAIN**



# What is blockchain? As per Wikipedia ...

A blockchain is a continuously growing list of records, called blocks, which are linked and secured using cryptography. Each block typically contains a cryptographic hash of the previous block, a timestamp and transaction data. By design, a blockchain is inherently resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way". For use as a distributed ledger, a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks, which requires collusion of the network majority.

# TL;DR - What is blockchain?

- It is a decentralized database, with a built-in incentive model
- Smart contracts are roughly equivalent to stored procedures
- Bitcoin blockchain (Gen 1 - 2008+) can only record balances
- Ethereum (Gen 2 - 2014+) blockchain can contain arbitrary data-structures
- Other, later (Gen 3 - 2016+) blockchains are much the same

# What is decentralization?

		Logically centralized		Logically decentralized	
		Politically centralized	Politically decentralized	Politically centralized	Politically decentralized
Architecturally centralized	Politically centralized	Traditional corporations	Direct democracy	?	?
	Politically decentralized	Civil law	Blockchains, Common law	Traditional CDNs, Esperanto (initially)	BitTorrent, English language
Architecturally decentralized	Politically centralized	?	?	?	?
	Politically decentralized	?	?	?	?

## Three reasons for Decentralization

The next question is, why is decentralization useful in the first place? There are generally several arguments raised:

- **Fault tolerance**—decentralized systems are less likely to fail accidentally because they rely on many separate components that are not likely.
- **Attack resistance**—decentralized systems are more expensive to attack and destroy or manipulate because they lack sensitive central points that can be attacked at much lower cost than the economic size of the surrounding system.
- **Collusion resistance**—it is much harder for participants in decentralized systems to collude to act in ways that benefit them at the expense of other participants, whereas the leaderships of corporations and governments collude in ways that benefit themselves but harm less well-coordinated citizens, customers, employees and the general public all the time.

# Some example blockchain projects

- Bitcoin and Bitcoin Cash
- ZCash and Monero
- Ethereum and Cardano
- Ripple and Stellar
- Hyperledger Fabric
- Corda
- RChain
- EOS
- Tezos

# Types of project

- Public permissionless blockchain
- Public permisssed blockchain
- Consortium blockchain
- Private blockchain

# Alternate consensus

- Proof of Work (POW)
- Proof of Stake (POS)
- Delegated Proof of Stake (DPOS)
- Traditional Byzantine Fault Tolerant (BFT)
- Some examples:
  - SHA3
  - Casper
  - Tendermint
  - Ouroboros
  - Raft
  - PBFT

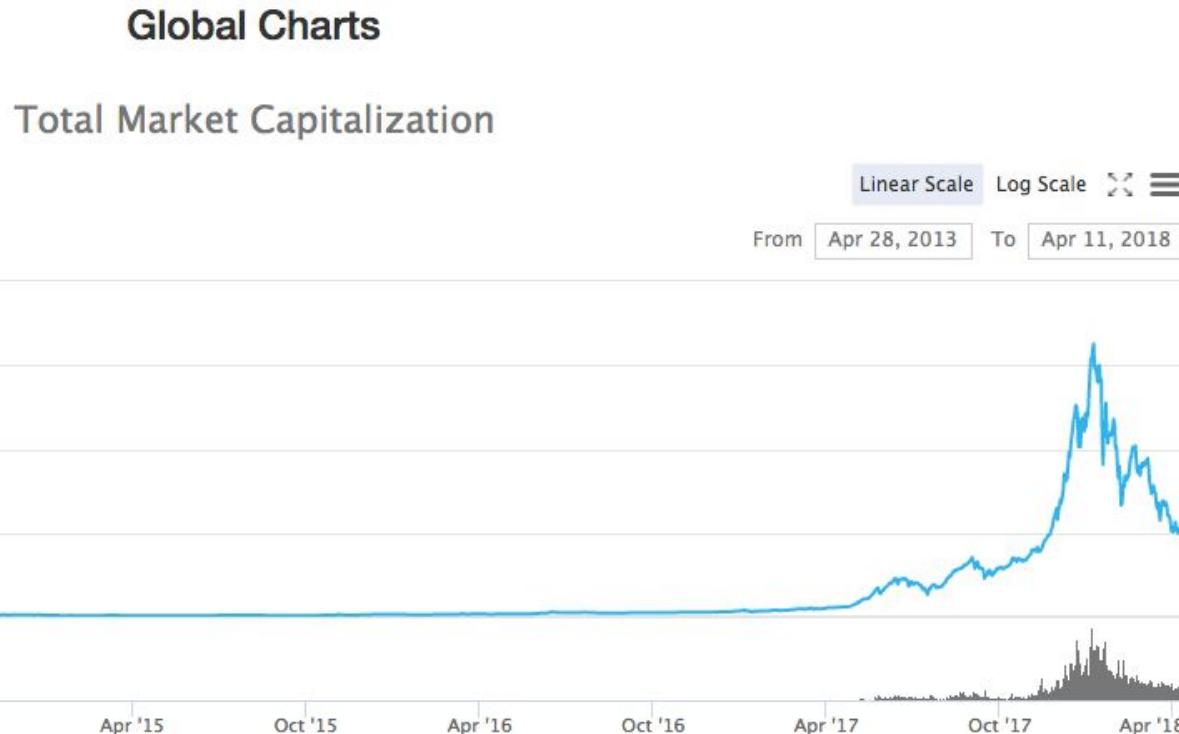
# Privacy and confidentiality

- Blockchains are public by default
- Zero knowledge proofs (like zk-SNARKs)
- Ring Signatures
- Private state database (Quorum)

# Cryptocurrencies just like the dotcom bubble?



# Transformational tech, but overvalued too early



# There are many “videogame coin” projects

- EnjinCoin
- GameCredits
- DMarket
- ABYSS
- PlayKey
- Game Machine
- Game Protocol

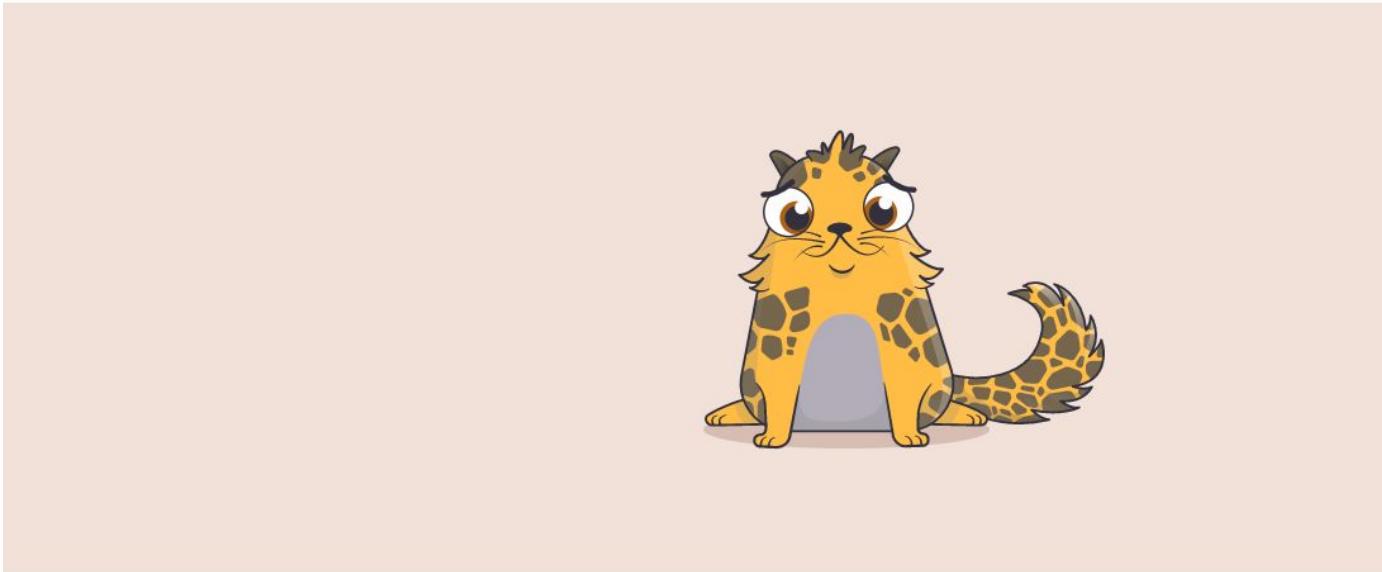
I personally see close to zero short-term value in any of them. Maybe such a project will make sense in 2-3 years time? Maybe.



CryptoKitties

Start Meow

Marketplace



## Fluffy Founder

Kitty 4 . Gen 0 . Swift Cooldown ⓘ

ColonelKitty  
Owner





POSTED ON FEBRUARY 18, 2018 BY CRYPTOCURRENCYCLARIFIED

## 4 ETHEREUM GAMES THAT COULD PASS UP CRYPTOKITTIES



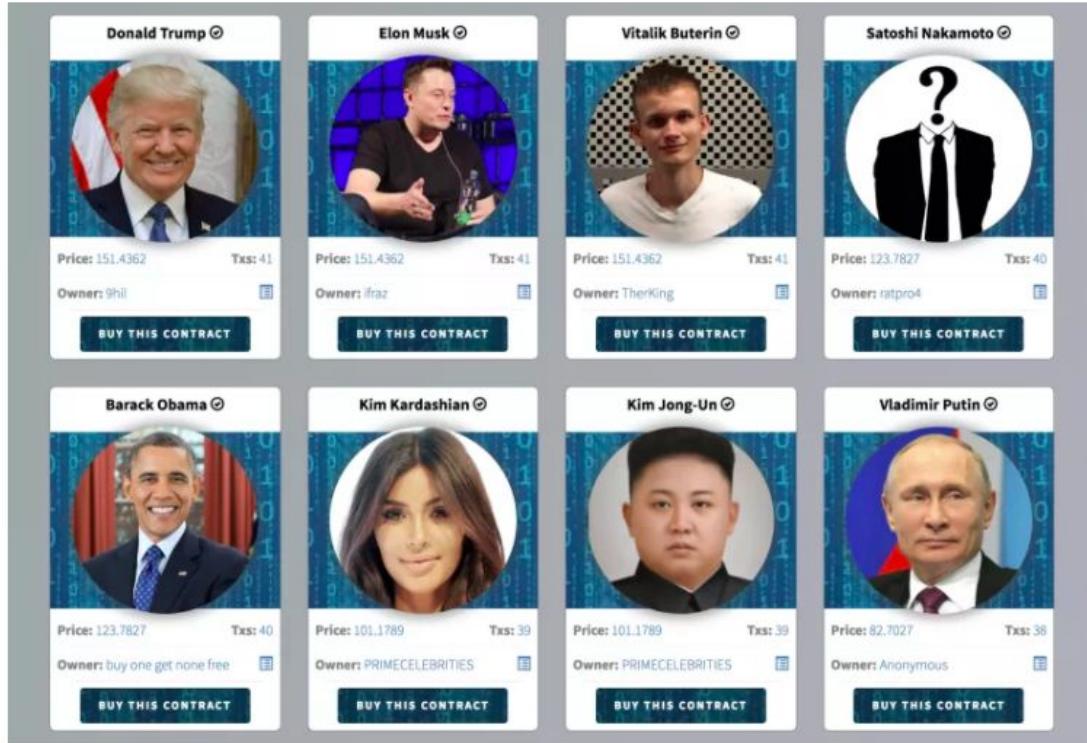
## 1. CryptoCountries

IT'S A CRYPTO WORLD.  
**DEAL WITH IT!**

CRYPTO COUNTRIES.IO

f

## 2. CryptoCelebrities



### 3. Crypto-All Stars

#### Stay Away

Updated: Avoid like the plague. One of the Developers sold his ownership to someone who has no plans to further the game.

Your favorite  
shitposters are  
now on the  
blockchain. And  
you can own  
their only Smart  
Contract.

Buy and sell collectible Crypto All Star  
Smart Contracts on the blockchain.

Crypto Randy Marsh  
@nondualnelly  
#0  
i like turtles

Transactions: 10 | Price: 0.004 eth

PURCHASE CONTRACT

share

## World Of Ether



An upcoming game already has cryptocollectible addicts losing their minds and it hasn't even launched yet.. This game has the potential to be by far the biggest Ethereum games ever

# Private/consortium blockchain for fraud prevention

- Strong analogy with use of private blockchains in financial institutions
- Consistency of information across multiple systems / entities
- In finance, that is retail banks, plus central bank and regulators
- For video games, that is publishers, plus platform holders
- Platforms = XBOX LIVE, PlayStation Store, App Store, Google Play, Steam
- Publishers = EA (Origin), Activision, King, Tencent, etc

# Want to get read more?

- “*That Book on Blockchain*”
- “*Mastering Bitcoin*”
- “*Mastering Ethereum*”
- “*Blockchain Revolution*”
- Podcasts
- Reddit
- But mainly Google
- Some online training starting to appear
- And university courses

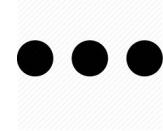


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Varro Technologies • Leeds University  
Vancouver, British Columbia, Canada • 500+ 

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Bob Summerwill is Co-Founder and CTO of Varro Technologies, a community leader for the Ethereum Project and Community Ambassador for the Sweetbridge Project. Bob has made a public and ongoing...

<https://bobsummerwill.com/contact/>



# AMA