personal details:

name: Thanos Vassilakis mobile: +1-917-517-5912 email: thanosv@gmail.com nationality: USA & Greek

spoken languages: English & French

interests: Art, Reading, Music, Film, Gardening, Skiing, and

programming

currently:

at: RBC CM

title: Director of R&D for Technology & Director of Shared Technical

I'm responsible for the RBC's 2020 technology strategy architecting the following: Cloud and Cloud Agnostic like service, Data Lake/Big Data, Open Source, Cyber Currencies & Blockchain, UI, and Machine Learning.

my R&D portfolios include:

- Machine Learning
- BlockChain & Cyber currencies
- Information Gathering NLP framework to gathering technological and development intelligence
- Creating Using custom chips to process partial diff equations and nonlinear problems

As Director of Shared Technical Services I'm building key technology services for the bank to meet its 2020 strategy objects. Essentially I'm building out many services similar to those found AWS with the same SLA but with the extra feature of being cloud vender agnostic and bridging on-prem infrastructure and our various vender clouds.

my Shared Technical Service portfolios include:

- Universal business data discoverer a la Google
- Data federation A Serverless GraphQL interface to all business data.
- A data lake based fed through our own Fuse base file system
- Function as a Service
- Simple Notification
- Simple Queuing Service
- Database as a Service
- Bankwide Configuration Service
- Bank wide mapping and preference service
- Implicit localized caching service a distributed p2p big data cache where the network is the bottleneck
- Glacier like Deep Storage
- Workflow and Rules as a service
- Blockchain as a Service on which many of the above services are built, thus managing cost, chargeback and fair use of service.
- Sentry type error tracking and monitoring and bank wide central logging
- Jupiter Notebook services
- Machine Learning & AI as a Service
- A Generic hospital

my pitch: I'm looking for work where my experience and creative development skills will be used and will count. I'm not seeking a title but a position where my I can remain hands on and yet be given enough responsibility and trust, and empowerment to really contribute to the company. In my career I've had the privilege to built really great development groups, and with them create powerful and successful services and products. I'm hoping these experiences and my strong technical and creative abilities will be exploited. Although I've often led I enjoy being part of a team and very will take a back seat; listen, learn, reflect and then contribute.

some projects:

ANEX: A cryptocurrency exchange.

BTC: A cryptocurrency trading platform that aggregated across exchanges.

Chromite: A Bancor based crypto currency backed by Chromium mine deposits in the ring of fire.

Echo: A stream based realtime social analytical engine.

TradeSource: A trade abstraction framework written in Erlang and Python.

MarketSource: A market data framework written in Erlang and Python.

HyperState: A gaming framework for the iPhone

AudioBook: An audio visual book frame work for the iPhone as well as being on the team that were the first to bring chess (Caissa) to the

Syntazo & Taxy: An Erlang/OTP competitor to Twitter\'s Storm that can be used as a high performance distributed EC2 based stream processing with realtime dynamic topology configuration based on RIAK's core. Phonescript: I ported postscript to J2mE, Brew and Symbian. What it brought over other frameworks? A small, under 35k, interpreter which included floats and 2-D transparency. It's very fast. One program can run on J2ME, Symbian, and Brew phones. Can load and run code on the fly. Try that in J2ME!

MobileNewton: My white elephant port of Newton script for phones, cool but uses too much memory forMIDP 1.0 phones. Phonescript replaced this effort.

Ilab: An object oriented workflow system that conforms to all 39 Eindhoven patterns. It's used by the European Parliament\'s EPEDES, SECTORS system control, NYSE and SIAC\'s compliance systems.

async-j: I basically took the crippled Java nio and wrapped it to make it behave like Python's async chat. This give you a really fast server framework JETTY style, but much lighter and easier to use.

VisualTrading: A lightweight java UI framework for trading front-ends. Python Server Objects: "A kind of Ruby on Rails or Django but developed in 1996 for Python

Hope: British Telecom's white elephant, but they paid me well and it was still a great functional language.

NewtonSmalltalk: "Yes I ported Smalltalk to the Newton.

programming in years:

c, fortran, C++ > 30 python > 20		go, elixir, solidity > 2
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employees: AAH Medical, Apple, Atari, Barclays, Books On Demand", British Telecom, Ceasars Casino, Credit Suisse, Electric Coin Company, Ericsson, European Community/Cordis, European Pariliament, Ferrantti, Honeywell Bull, HP, ICAP, Infinigon Group, JP Morgan, Multitone, NYSE, Panasonic, RBC, SIAC, Unilever, West LB, Zingy

domains:

robotics - Unilever military - Ferrantti comms/telecom - British telecom, Ericsson, HP, Honeywell Bull, Multitone, Reuters, Drake games - Atari, Zingy gaming - Ceasars Casino, Electric Coin Company, Zingy medical - AAH Medical blockchain, encryption & electronic money - British telecom, Ceasars Casino, Ferrantti, Marita Bank, RBC CM, Infinigon Group trading - Barclays, ICAP, JP Morgan, NYSE, RBC, SIAC risk - West LB, JP Morgan, Credit Suisse, RBC CM big data - Infinigon Group, RBC CM social media analytics - Infinigon Group, RBC CM machine learning - Ceasars Casino, Infinigon Group, RBC CM NLP - Ceasars Casino, Infinigon Group, RBC CM cloud - Infinigon Group, RBC CM HPC - JP Morgan, NYSE, SIAC, HP, RBC CM mobile - ICAP, Ericsson, Zingy, Apple workflow - European Parliament, European Community

technologies: django, RabbitMQ, NAT, iris, pastry, scribe, Riac Core, Messos, Docker, Kafka, disco, Redis, Memcache, Postgres, Elasticsearch, Hadoop, node, web sockets and a lot more

stack of past work:

RBC CM, Infinigon Group, RBC CM, JP Morgan, Credit Suisse, JP Morgan, Zingy, ICAP, SIAC/NYSE, Ericsson/HP, West LB, European Community, Ceasars Casino, European Parliamen, AAH Medical, Apple, Symantec (Zortech), Reuters International, Honeywell Bull, Drake, British Telecom, Ferrantti, Barclays, Multitone, Atari, Unilever, Atari, Electric Coin Company

bio: I started work in 1979 for the Electric Coin company programming slot machines. This work was more a combination of assembler and electronics. After graduating in Maths from the North London Polytechnic, I joined Atari's PC games division. After Atari, I became a freelancer and apart from some startup stints I kind of remained a freelancer until this current position. If my grandchildren were ever to ask me "What did you do when you were..." I would be hard placed to mention anything remarkable. Much of my life has been programming in itself which has not left a visible trail.

In the eighties in the UK I avoided financial institutions except for developing in 1985 the trading system used by Barclays. My work included building standard libraries for Walter Bright's C++ distribution, porting Eispack and Linpack to C++ and ADA, writing Forth based RIP engines for Panasonic's laser printers, writing most of the drivers for their fax machines, implementing the functional programming language, Hope, for

Imperial College, developing fast time series databases for telecom for BT, fuzzy logic control systems for Unilever, and Occam based neural networks on Transputers for the UK Treasury. During this period I also worked for Ferranti on designing and building a real-time operating system for their Lynx helicopter program. The early nineties started with an interest in PDA's, and I joined Apple's Newton program developing out programming languages and tools for the growing Newton community. It was through working for Apple in 1993 that I discovered the internet and in that year I started to develop a centralized internet-based patient register for the National Health. In I 1994 joined DG1 in Luxembourg as the IT advisor to the European Parliament president, Klaus Hänsch. While there I got into workflow systems and developed their internet-based workflow system that is still in use. In 1995 I got a commission to build an internet casino for Caesars. The casino presented many new challenges in online development and design. With the Marita bank, we developed an early form of cyber currency. After Luxembourg, I moved to Dusseldorf to work at Westdeutsche Landesbank to develop their VAR system. The finance world was alien to me, and after a year I bailed out and joined Ericsson on their distributed switch programming system based on Erlang.

In 1997 I returned to my hometown of New York and started developing a new trading system for NYSE. It was their first time to run a system on the Internet and possibly the first financial production system written in Python. Since then I've been mostly working on finance gigs, developing high-frequency trading systems, trading platforms for fixed income and risk systems for commodities at various joints such as ICAP, BrokerTec, JP Morgan, Credit Suisse. There have been some sojourns with a few startups which included mobile apps, social media analytics, blockchains, smart contacts, and alt-currencies.

other posts & memberships:

Vise President of The National Center for Art and Technology of Greece Internet consultant to the cabinet of the president of the European Parliament, 1994-1996
Founder of the Linux & Python user groups in Luxembourg.
Founder of the Python user groups in Düsseldorf
Python Starship member

talks publications and articles:

Social media and News, Columbia University November 2017 Blockchains, Bloomberg Quant BBQ Talk September 2016 Art Market, Bloomberg Quant BBQ Talk April 2016 Social Analytics, Bloomberg Quant BBQ Talk 2015 Introducing Phonescript, MobiCom 2006 Flash Lite Application Development: Trails and Issues, Adobe MAX 2006 Financial Algorithms Cookbook, ISBN 978-1-4116-2259-3 Trading in Python, Fast Track PyCon 2002 Using LinPAK EISPAK from Erlang, Algorithms Journal, Vol 41, 1997 Beagle and Evolutionary Trading, Algorithms Journal, Vol 9, 1989 An EISPAK Introduction, Algorithms Journal, Vol. 8, 1988 A LinPAK Introduction, Algorithms Journal, Vol 7, 1988 How sharp is OCCAM, Algorithms Journal, Vol. 6, 1988 Fixed versus Float, Algorithms Journal, Vol 4, 1987 Cordic Functions, Algorithms Journal, Vol. 3, 1987 Finding primes Through Probability, Algorithms Journal, Vol 2, 1987 Large Arithmetic, Algorithms Journal, Vol. 1, 1987 Financial Numeric Algorithms Edition One, Algorithms Press 1987 Probably Prime, SIG Press, 1987