

# Nicolas Frega

SENIOR SOFTWARE ENGINEER ·

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## Skills

<b>Programming</b>	C/C++, Qt, Python, Node.JS, Golang
<b>Web</b>	HTML5, SASS/LESS, JavaScript, Ruby on Rails, React/Redux
<b>DevOps</b>	AWS, Terraform, Docker
<b>Blockchain</b>	Bitcoin, ETH, QTUM, Cardano

## Product Releases

<b>Charge.io</b>	iOS/Android Payments app - KYC/KYB smart widget - <a href="https://charge.io">https://charge.io</a>
<b>Korbit USA</b>	Backend infrastructure support for bitcond, ETC, and QTUM - <a href="https://medium.com/@KorbitExchange">https://medium.com/@KorbitExchange</a>
<b>BIGToken</b>	Backend ETH infrastructure - <a href="https://itunes.apple.com/us/app/bigtoken/id1319547236?mt=8">https://itunes.apple.com/us/app/bigtoken/id1319547236?mt=8</a>
<b>CTA Telescope</b>	Qt application for telescope - <a href="https://pathbrite.com/portfolio/P2SH6aPszG/professional-portfolio/item/P2SH6aPszGFPx7p">https://pathbrite.com/portfolio/P2SH6aPszG/professional-portfolio/item/P2SH6aPszGFPx7p</a>

## Experience

### Charge.io @ 55 Foundry

Los Angeles, CA

VP OF ENGINEERING

Mar. 2019 - Present

As the VP of Engineering for Charge I lead a talented team of engineers (5) in developing the Charge ecommerce suite of products. This includes a mobile Flutter app which implements a blockchain inspired patented transaction signing mechanism. A machine learning powered KYC/KYB cross-domain widget which allows merchants to on-board their users while gathering real time stats. I designed the apps as a series of scalable microservices which were deployed and managed through a custom AWS infrastructure which I implement and deployed via reusable Terraform modules using a multi-account AWS design patter. I designed and implement the APIs using best practices following domain driven design, dependency injection, and opanapi specifications. All services were containerized using Docker and orchestrated via Kubernetes.

The technology stack I implemented:

- React/Redux, zoid
- Nodejs, sequelize, redis, postgres, ddd, golang
- Flutter, codemagic
- Docker, Kubernetes, Terraform
- AWS, RDS, elasticsearch, ELB, EKS

### Korbit USA

Los Angeles, CA

BLOCKCHAIN ENGINEER

Jul. 2018 - Feb. 2019

At Korbit USA I am responsible for implementing backend blockchain support for the Korbit exchange, I developed a process which includes:

- Cloud architecture design based on custom modules and services.
- Unit and integration testing of infrastructure.
- New blockchain integration and support per sprint.
- Development of custom Terraform modules and services to support cloud infrastructure, forks, client updates, wallet/address management.
- Development of custom API for exchange and user integration.

### Srax/Blockchain Identification Graph - BIG

Los Angeles, CA

BLOCKCHAIN DEVELOPER

Nov. 2017 - Jul.2018

I was responsible for the life-cycle development and implementation of the Blockchain/Ethereum infrastructure of the application.

- Smart Contracts development and testing.
- Deployment to Rinkeby testnet and Main net.
- Web3, Geth, and Node.JS development of back end implementation and application interaction through custom API.
- Developing of multi signature wallet solution dapp with React/Redux and web3.

## DGF New Tech Canada Ltd.

Vancouver, Canada & LA, U.S.A

CHIEF TECHNOLOGY OFFICER

Jan. 2014 - Dec. 2017

DGF New Tech Canada specializes in remediation of industrial waste through the use of nanoparticles. Responsibilities included:

- Designed and implemented scientific and engineering projects for the testing and application of different nanoparticles for remediation of contaminants.
- Performed scientific validation on the efficacy of nanoparticles for the remediation of PCBs and arsenic.
- Managed investment opportunities, including a multimillion dollar proposal for magnetic assisted sedimentation of mature fine tailings through the application of nanoparticles.

## University of California, Los Angeles

Los Angeles, CA

HIGH ENERGY PARTICLE PHYSICS RESEARCHER

Jan. 2012 - Jan. 2014

Worked in research and development of the Cherenkov Telescope Array Prototype. Responsibilities included:

- Developed custom software (C++/Qt) to analyze and interpret large data sets to aid in the calibration and alignment of telescope.
- Wrote custom back end algorithms and processes to measure, analyze, and present complex data sets.
- Developed data algorithms to improve calibration efficacy. Implemented solution via back end software design.

## Education

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### University of California, Los Angeles

Los Angeles, CA

BACHELOR OF SCIENCE IN PHYSICS

Sept. 2012

- Emphasis on particle physics and data analysis.

### University of Chicago

Chicago, IL

HIGH ENERGY PARTICLE RESEARCHER

Sept. 2011

- Research Experience for Undergraduates in particle physics, developed mathematical models and algorithms.

### Blockchain Council

Los Angeles, CA

CERTIFIED BLOCKCHAIN DEVELOPER

March 2018

- Certificate ID: 11401783