

# GUI GONCALVES

You can't buy happiness, but you can buy the services of a software engineer who is proficient in multiple programming languages and paradigms and experienced in launching new products to market — and that's pretty much the same thing.

I work best in high-performance, autonomous teams with high ownership of a big problem space. I believe *quality is free* for those willing to pay for it. I am convinced developers are uniquely positioned to define and build great products, and it has been my privilege to work on a few such teams.

## Work experience

### Funding Circle

Engineering Manager  
Lead Engineer  
Software Engineer

Remote, UK

Since Sep/23  
Oct/21 – Sep/23  
Jul/21 – Oct/21

I work on the US business at FC. I lead the team that works on the credit strategy, maintaining the **decisioning systems** and co-designing processes with Risk and Operations. Some important projects the team has delivered:

- Lead the **handover process** for Engineering as part of a merger
- **Automate credit decisions** that previously had to be reviewed by an underwriter
- Design a **domain-specific language** for automated credit decisions
- Aggregate credit policies in a single read-only UI, for **auditability**
- Conduct **event storming** sessions to identify and document tacit knowledge

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### Citigroup

Vice President, FX Tech

London, UK

Jul/20 – Jul/21

I was part of the team maintaining **Trader Toolkit**, an application reading from dozens of data sources inside the bank (order books, APIs, relational DBs, **kdb+**) and exposing them as **time series** that can be composed, compared, correlated and plotted. This was done with a **Kafka Streams**-like library in **TypeScript** that ran on both **Node** and on browsers. My work involved:

- Maintaining the library that powered all those abstractions;
- Understanding how traders and quants used our applications, to prioritise adding new data sources and operations;
- Expanding our user base by adding the time series from different asset classes;
- Coach the team in our agile practices, to ensure value was delivered continually

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### Tractable

Software Engineer

London, UK

Oct/18 – Jul/20

I worked mainly on the **AI Review** product, which compares invoices produced by body shops with estimates generated by computer vision. During my time there, we **tripled our client base** with significant geographic expansion, the number of claims we processed going up by **multiple orders of magnitude**.

- Rewrote the backend from an anaemic model to a semantically rich one. The time taken to add a new check decreased from a month to less than a week
- Launched a **new product**, designed in collaboration with some of our biggest clients
- Helped in the launch of the **AI Estimating** product — where orders are generated entirely by our trained models, based on smartphone pictures and some simple questions

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### Lastline (now part of vmware)

Software Engineer

Remote, US

Dec/15 – Oct/18

When I joined Lastline, they were known mainly for their industry-leading malware sandbox. Over time, their network security product became more robust. I worked on the webapp that put everything together: analysts used it to find events and publish signatures; reverse engineers used it to observe malware behaviour; admins used it to manage their network and devices.

Initially a “skunkworks” project, I was part of the small team launching **NTA**, a product that analysed and correlated netflows to tell a complete story, according to the [ATT&CK framework](#).

## Education

### Federal University of São Carlos

Industrial Engineering (*incomplete*)

2010 – 2015

[ufscar.br](http://ufscar.br)

I studied Industrial Engineering while working part-time as a programmer. Around the time when I was writing my senior thesis, I realised *programming* was actually what I loved to do. I left University and pursued programming full-time instead.

Which is not to say my time at the university was not helpful. A lot of the state of the art in manufacturing science is useful in software engineering:

- Quality control
- Systems thinking
- Lean and just-in-time