

# Bruno Saboia de Albuquerque

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Aeschengraben 17, 4051 Basel, CH  
e-mail: [bruno@saboia.it](mailto:bruno@saboia.it) – Tel: +41 78 245 7688  
[GitHub](#) – [LinkedIn](#)

EDUCATION	<b>Universidade Federal do Ceará</b> UFC, Fortaleza, Brazil — <a href="https://ufc.br">https://ufc.br</a> <i>Bachelor of Science</i> BSc in Economics	2013 - 2016
	<b>Universität Liechtenstein</b> UNIL, Vaduz, Liechtenstein — <a href="https://uni.li">https://uni.li</a> <i>Exchange Student</i> Winter Semester in Business Administration and IT	2015 - 2016
EXPERIENCE	<b>Bank for International Settlements, Basel, CH</b> — <a href="https://bis.org">https://bis.org</a> <i>Data Analytics Engineer</i>	May 2022 - Present
	<p>The BIS (Bank for International Settlements) is the bank for central banks. Its mission is to support central banks' pursuit of monetary and financial stability through international cooperation.</p> <p>My mission is to work with AI-related projects, mainly working on BIS GPT, an LLM-based chatbot compliant with the security and privacy requirements needed by the bank.</p> <p><i>Technologies: TypeScript, React, Python, LLM, RAG, Azure, OpenShift, Docker, ArgoCD, GitHub</i></p>	
	<b>Bank for International Settlements, Basel, CH</b> — <a href="https://bis.org">https://bis.org</a> <i>Business Analyst/Developer</i>	May 2022 - May 2024
	<p>The BIS (Bank for International Settlements) is the bank for central banks. Its mission is to support central banks' pursuit of monetary and financial stability through international cooperation.</p> <p>My mission was to help the Risk Management department to understand the different aspects of financial risk that the bank is incurring, using best IT practices to do so.</p> <p><i>Technologies: C#, Git, Azure DevOps, Python, PowerShell, Bash, OpenShift, SQL, Octopus, ArgoCD</i></p>	
	<b>Clevertch, Remote (Brazil – US)</b> — <a href="https://clevertch.biz">https://clevertch.biz</a> <i>Senior Software Engineer</i>	March 2022 - May 2022
	<p>Clevertch is an American IT company, providing consulting services for large customers around the globe.</p> <p>My mission was to help customers implementing the best solutions they can in their projects, giving them insights and planning on how to build better software. I also wrote Python code and SQL queries.</p>	

*Technologies: Python, Apache Airflow, Postgres*

**Tesseract, Remote (Brazil – Finland)**  
— <https://tesseractinvestment.com/>  
*Full-stack developer*

*September 2021 - March 2022*

Tesseract is a Finnish startup which borrows cryptocurrencies, matchmaking investors and lenders. It is Fin-FSA regulated digital asset innovator, backed by reputable investors, focusing on institutional brokerage and asset management.

My mission was to enhance the infrastructure using IaC (Infrastructure as Code).

*Technologies: Pulumi, TypeScript, GitHub Actions*

**BEC Financial Technologies, Roskilde, Denmark**  
— <https://bec.dk>  
*Senior Software Engineer*

*April 2021 - September 2021*

BEC is a Danish fintech that provides services for medium-small banks in the Nordic country.

My mission was to enable developers to use the Event Streaming Platform as efficiently as possible.

*Technologies: Kafka, Java, Bash, OpenShift, Git, CDC, Docker, Jenkins*

**Danske Bank, Copenhagen, Denmark**  
— <https://danskebank.dk>  
*Senior Software Engineer*

*February 2019 - March 2021*

Danske Bank A/S is a Danish multinational banking and financial services corporation, founded in 1871.

My mission was create a new corporate solution to search for payment, named Smart-Search. I was also involved with other tasks and projects.

*Technologies: Kubernetes, DB2, C#, Jenkins, .NET Core, COBOL, Kafka, Java, Kotlin, Rust, ELK stack*

**Coinify ApS, Copenhagen, Denmark**  
— <https://coinify.com>  
*Senior Software Engineer*

*August 2017 - January 2019*

Coinify is a Nordic startup which enables merchants to accept cryptocurrencies in exchange for their goods and services, either in mortar-and-brick or online stores. The company also provides a cryptocurrency trading platform.

My mission was to develop new features and improve existing ones, as well as fixing bugs.

*Technologies: Node.js, TypeScript, Docker, AWS, PHP, HTML/CSS*

**AH Integration Solutions AS, Remote (Brazil – Norway)** *February 2017 - August 2017*  
— <http://ahint.no/> (archived)

## *Consultant*

AH Integrations was a Norwegian company working in the health sector.

My mission was to act as a development consultant, helping the team to make decisions regarding tech choices, while performing coding tasks.

*Technologies: C#, WPF, Crystal Reports*

**ITOUCH TECH**, Fortaleza, Brazil

July 2015 - February 2017

— <https://itouchtech.us>

*CTO*

ITOUCH TECH is an US-based company which provides FFLs with a digital way to fill ATF4473 forms.

My mission was to design and implement the systems, migrating their old solution to more modern technologies, as well as deploying them to the customer stores.

*Technologies: C#, Windows Forms, WPF, Octopus*

**HBS**, Fortaleza, Brazil

April 2014 - July 2014

— <https://hbs.tv>

*IT Specialist – contract*

Founded in 1999, Host Broadcast Services (HBS) was originally established with the core mandate of being the Host Broadcaster (HB) for the 2002 FIFA World Cup Korea/Japan™; the organisation has since developed as a renowned host broadcast expert.

This was a temporary contract, taking place during the FIFA World Cup in Brazil.

My mission was to aid HBS to have a stable, smooth and reliable IT site, so it could broadcast the FIFA World Cup to the entire world.

*Technologies: AD, Windows Server, C#, VB, satellite comm, optical fiber*

**Predictive Science**, Remote (Brazil – US)

January 2013 - March 2014

— <https://predsci.com>

*Senior Software Engineer*

Predictive Science Inc. is an employee-owned company that delivers state-of-the-art scientific solutions.

My mission was to develop a system to Verizon to aid the ERT (Executive Response Team) to make informed decisions about customer issues.

*Technologies: Python, Kafka, C#*

**Upstream Systems**, Athens, Greece

July 2012 - December 2012

— <https://www.upstreamsystems.com>

*IT Specialist/Copywriter*

Upstream Systems is a Greek media company that helps mobile carriers to promote products and services to their customers.

My mission was to help copywriters to track their work, as well as copywriting in

Brazilian Portuguese for Brazilian mobile carriers.

*Technologies: Excel, VBA*

**Procuradoria Geral do Estado do Ceará - PGECE**, Fortaleza, Brazil    March 2011 - December 2011

— <https://pge.ce.gov.br>

Senior Software Engineer

PGE is the state attorney central for the state of Ceará, in Brazil.

First, my mission was to aid PGE on its goal to migrate to the digital judiciary process, which was then deemed as necessary by Brazilian Supreme Court.

After a promotion, my mission was to create PGE-C2, a cloud-based Android app that would be used for the daily operation of the attorneys.

*Technologies: Ruby, Rails, C#/Mono, Postgres, Solr, Android, Java*

**SecreINET**, Fortaleza, Brazil

January 2009 - Dec 2011

— [secrelnet.com.br](http://secrelnet.com.br)

Senior Software Engineer

SecreINET is an ISP of Fortaleza, Brazil. It was one of the pioneers of both dial-up and broadband technologies in the area.

My mission was to create Spider, a project to automate tasks which before its implementation required a human operator (such as creating accounts, websites, directories for hosting purposes, and many more).

*Technologies: .NET, Java, C, Windows Development, WMI, VB, Linux, Hyper-V, Active Directory*

## PUBLICATIONS

- *Over the Cliff: How Brazil's 2004–2016 Business Cycle Became Its Worst Recession in a Century* (2020), DOI: [10.35297/qjae.010027](https://doi.org/10.35297/qjae.010027)
- *Understanding Bitcoins: Facts and Questions* (2015), DOI: [10.5935/0034-7140.20150001](https://doi.org/10.5935/0034-7140.20150001)

## REVIEWS

### Bachelor thesis:

- *Os efeitos do grau de Liberdade Econômica sobre o Índice de Desenvolvimento Humano (IDH) e o IDH ajustado à desigualdade*, Renato Leitão ([2022](#))
- *Bitcoins - uma moeda global e descentralizada*, Raíssa Guerra ([2022](#))
- *Abertura comercial e produtividade: evidências empíricas de correlação nas últimas duas décadas*, Saulo Queiroz ([2021](#))
- *Mercado de criptoativos: conjuntura e desafios*, Gabriel Radaelly ([2021](#))
- *A moeda digital do século XXI: um estudo de caso sobre o Bitcoin*, Hemerson Braga ([2021](#))

### Papers:

- *The Political Thought of José Osvaldo de Meira Penna*, Gabriel F. Benzecry, ([2023](#))

## AWARDS

- *SAP DemoJam Barcelona*, 1st place ([2015](#))

- CERTIFICATIONS**
- *Machine Learning*, (2013)
  - *Computational Investing, Part I* (2013)

**SKILLS**

**Programming-related skills (in years of experience):**

- *C#*, 20+
- *Python*, 20+
- *SQL* 20+,
- *Bash/Shell* 15+,
- *JavaScript*, 5
- *TypeScript*, 3
- *Ruby*, 3
- *React*, 1

**Technologies (in years of experience):**

- *DevOps* 10+
- *AI (Artificial Intelligence)*, 6
- *ML (Machine Learning)*, 5
- *LLM (Large Language Models)*, 2
- *RAG (Retrieval Augmented Generation)*, 1

**Languages:**

- *Portuguese*, Native
- *English*, Full professional proficiency
- *Spanish*, Limited professional proficiency
- *German*, Basic
- *Italian*, Basic
- *Danish*, Basic
- *Hebrew*, Basic

**Other skills:**

- *OS (Linux, Windows, macOS)*, Advanced
- *Office Suite (Word, PowerPoint, Excel (with VBA))*, Advanced
- *Networking*, Intermediate
- *OCP/K8S*, Intermediate
- *LaTeX*, Intermediate
- *R/Matlab/Octave*, Intermediate
- *AutoCAD*, Intermediate
- *Photoshop/Image editing tools*, Basic

## HOBBIES

### Sports:

- *Go-karting*
- *Martial arts*

### Music:

- *Singing*
- *Guitar*
- *Piano*

### Research:

- *Genealogy*
- *History*
- *Mathematics*
- *Physics*