Augusto Kielbowicz

saxa.xyz

(he/him)

As a problem-solver at heart, I thrive on tackling challenges by leveraging my diverse skill set and experiences.

I hold a Licenciatura in Physics, which honed my ability to model problems by seeking simpler, yet effective solutions and finding the right level of abstraction. This academic background instilled in me the principle that there's always a path of least action.

Professionally, I have been working as a Quantitative Developer and Software Engineer, specializing in numerical code for Valuation and Risk computation in Multi Asset Class systems. My production code experience spans Python and C#, while I prefer Julia for Research and EDA, and use Python or Powershell for tooling and scripting in Windows environments.

My curiosity has led me to explore functional languages, resulting in the development of several DSL POCs in F# and Clojure. Additionally, I actively participate in a reading group focused on Computational Category Theory, using OCaml.

I enjoy thinking in stochastic terms, considering possibilities and their potential consequences, and continuously seek out new opportunities to apply my analytical skills and passion for problem-solving.

Education

Licenciature, Physics (2011-2017) *Thesis*: Statistic Analysis and Numerical Modeling of Single Particle Trajectories: Diffusion and Confinement Mechanisms

Experience

Software Development

SimCorp (03/2024 - present | 5M)

Associate Principal, Core Analytics

```
- Integrate Quant UI to pre-existing Axioma Risk UI
- Develop POC of DSL for interacting with Pricers
- Develop POC of interactive Q&A Chatbot for product documentation with LLM+RAG
- Work on redesign of libraries to work with Automatic Differentiation and
integrate with third party provider of AD tooling
```

Qontigo (09/2020 - 03/2024 | 3Y7M)

@akielbowicz-qontigo

Associate Principal, Core Analytics (02/2023 - 03/2024 | 1Y2M)

```
- Manage junior developers
- Maintainer and Core developer of Quant Analytical libraries
- Design and develop new component library for Curve construction and operation
(Rates, Yields, Discounts, Spreads)
- Design and lead development of UI based on `ipywidgets` and `voila` to expose
Quant libraries for interactive usage
- Manage deployment of containerized apps to Azure
```

Associate, Core Analytics (09/2020 - 02/2023 | 2Y6M)

```
- Manage research internship on usage of NeuralSDE for European Option Pricing
```

```
using Julia.
- Design and develop infrastructure of C# Monorepo for Analytical Libraries to
extract Quant and Numerical code from monolithic repository
```

J.P. Morgan (07/2018 - 08/2020 | 2Y2M)

Technology Analyst, Rates CIB.

```
- Migrate reporting services from Kapital (SmallTalk) to Athena (Python)
- Provide support to Rates Quant team
```

Open Source (02/2016 - present | 8Y)

@akielbowicz

Publication

Shared Memory Semi-Implicit Solver for Hydrodynamical Instability Processes (2023)

Photon Counting Module based on Avalanche Photo-Diodes (2017)

Teaching Experience

Universidad de Buenos Aires Profesor de An�lisis y �lgebra, CBC diciembre de 2020 - julio de 2022 (1 a�o 8 meses) Ciudad Autonoma de Buenos Aires, Argentina

Southern International School Profesor de F�sica, Matem�tica y TICs junio de 2016 - 2016 (menos de un a�o) Hudson, Buenos Aires

Departamento de F�sica, Exactas-UBA Ayudante de Segunda febrero de 2015 - marzo de 2015 (2 meses) Buenos Aires, Argentina

Ayudante de trabajos pr�cticos en la materia de verano F�sica II para Bi�logos y Ge�logos Departamento de F�sica, Exactas-UBA Divulgador Cientifico marzo de 2013 - diciembre de 2014 (1 a�o 10 meses) Buenos Aires, Argentina

Ayudante en los talleres de “�C�mo trabajan las f�sicas y los f�sicos?”, 2013 y 2014 “Curso Netbooks Uno a Uno”, Abril 201