

# Emanuel Fontelles | Curriculum Vitae

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I'm a PhD student on Complex Systems, an interdisciplinary field of sciences, working with networks in general. I've been studying Complex Networks, Econophysics, Markowitz efficient frontier, Minimum Spanning Tree in stock market and Black-Scholes model, algorithms and data structures. My background is in physics and statistical mechanics. I have skills on programming languages, machine learning algorithms, data mining and data visualization.

## EDUCATION

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- **PhD in Physics, Complex Systems** **Ceará, BR**  
*Federal University of Ceará* *since Mar 2018*
- **MSc in Physics, Complex Systems** **Ceará, BR**  
*Federal University of Ceará* *Mar 2016 – Feb 2018*  
Master thesis: Estudo de redes complexas e Mecânica Estatística não-extensiva.  
(Complex networks and non-extensive Statistical Mechanics).
- **BSc in Physics** **Ceará, BR**  
*Federal University of Ceará* *Mar 2012 – Feb 2016*  
Bachelor thesis: Percolação e Criticalidade Auto-Organizada.  
(Percolation and Self Organized Critically).

## EMPLOYMENT

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I have an solid mathematical and programming background. I am looking for a data scientist position to explore my skills as scientist, as also an exploratory data analyst.

- **PhD student in Physics** **Ceará, BR**  
*Federal University of Ceará* *since Mar 2018*  
Developing algorithms to generate complex networks using non-extensive Statistical Mechanics.

## SKILLS

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I am an active Python user doing scientific computing. I am proficient using Python data science ecosystem to perform a variety of tasks required in a daily data science project such as data exploration, visualizations and machine learning. I am also familiar with software and web development tools.

- **Python tools:** Pandas, Scikit-Learn, NumPy, NetworkX, SciPy, Jupyter and exposure to Tensorflow and Keras.
- **Data Visualization:** Matplotlib, Seaborn, Plotly, Bokeh, Altair, shiny and exposure to D3.js.
- **Other computer skills:** C/C++, R, Julia, Git, GitHub, Markdown, Jekyll, Ruby on Rails, YAML, JSON, SQL, CSV, XML, HTML/CSS and Javascript.
- **System Maintenance:** Linux, Bash, SSH and Windows.
- **Languages:** Portuguese (native), English (fluent) and some knowledge of Spanish.