Cruz **Elkin**

Master's Student

http://helq.github.io | helq | Bogotá, Colombia

Education

UNAL (Universidad Nacional de Colombia)

Bogotá, Colombia

M.S. in Computer Engineering (Ingeniería de Sistemas y Computación) — *Finishing date: First Semester of 2019*

- Thesis' title: Design and Implementation of Type Checking Algorithm for Shapes of Tensors in Python
- Advisors: Fabio Gonzalez, and Felipe Restrepo Calle
- Makes part of the research groups:
  MindLab `sites.google.com/a/unal.edu.co/mindlab`, and
  PLaS `www.hermes.unal.edu.co/pages/Consultas/Grupo.xhtml?idGrupo=2343`
- Excellent GPA of 4.7 (in a range from 0.0 to 5.0, where 3.5 is the minimum passing grade)

UNAL (Universidad Nacional de Colombia)

Bogotá, Colombia

B.S. in Computer Engineering (Ingeniería de Sistemas y Computación) — *Graduation date: Mar. 2017*

- Passionate on mathy and theoretical subjects (specially those regarding the intesection between Computer Science, Engineering and Maths, like algorithms and lambda calculus).
- Took part in "Programa de Mejores Promedios" (Best GPAs Program) at UNAL, which offered the oportunity to learn German
- Got excellent markings from the start and graduated with a GPA of 4.4 (in a range from 0.0 to 5.0, where 3.0 is the minimum passing grade)

Leibniz Universität Hannover

Hannover, Germany

Exchange studies - 1 year — *Sep. 2014 - Aug. 2015*

- Studied, among other subjects, "Parametric Complexity", "Logic and Formal Systems", and "Complexity and Logic"
- Worked in a project at the "Institut für Mess- und Regelungstechnik," to process the output of Texas Instrument measuring device into Matlab with a middleman piece of code written in C
- Improved English and German communication skills
- Got excellent markings 1.6 (where 1 is the maximum, 5 the minimum, and 4 is the minimum passing grade)

Skills

Programming (Advanced)	In decreasing order: *Python*, *Haskell*, and C++(-14)
Programming (Some knowledge)	Javascript, C, Assembly, Scheme, Java
Web	basic HTML5 and CSS
(Spoken) Languages	*Spanish* (L1), *English* (Advanced), German (Intermediate)
Linux Administrator	Debian, Archilinux
Frameworks and tools	Lately: Python projects, NumPy, Tensorflow (python and Haskell). Past: CMake, Qt

Experience

UNAL - Faculty of Engineering

Teaching Assistant / Lecturer — *Feb. 2018 - Exp. Dec. 2018*

- Teaching Intro to Programming in C++
- Writing an open access book in the spirit of "The little Schemer" (available in `github.com/helq/the-little-cppler-book`)

UNAL - Department of Chemistry

Research Staff — *Feb. 2017 - Jan. 2018*

- Developed two tools to help in the study of the phenomenon of Homochirality: Chemulator (C++-14) and Listanalchem (Python) (both available at `gitlab.com/homochirality`)
- Co-author of paper: Montoya, J. A., Mejía, C., Bourdón, R. D., Cruz, E., & Ágreda, J. (2018). On the Stability Analysis of Chiral Networks and the Emergence of Homochirality.

Extracurricular Activity

Hobbies

- I love to analyse and criticise movies, tv series, and books
- I like to attend language exchange meetings