# Nicolás Hock Isaza

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#### **EDUCATION**

# EAFIT University (Medellín, Colombia)

## Computer Science

2007-Current

Current Cumulative (GPA): 4.4/5

Selected Coursework:

 $\begin{array}{lll} \textbf{Computer Science:} & \text{Networking} \cdot \text{Databases} \cdot \text{Data Structures and Algorithms} \cdot \text{Computer Graphics} \\ & \cdot \text{Programming Languages} \cdot \text{Automata \& Computation} \cdot \text{Numerical Analysis} \cdot \text{Operating Systems} \cdot \\ & \text{Computer Architecture} \cdot \text{Compilers} \cdot \text{Software Engineering} \\ \end{array}$ 

 $\label{eq:Mathematics: Multivariable Calculus} \ \cdot \ \text{Linear Algebra} \ \cdot \ \text{Discrete Math} \ \cdot \ \text{Physics} \ \cdot \ \text{Statistics} \ \cdot \ \text{Operations Research}$ 

# Universidad de Antioquia (Medellín, Colombia)

#### Mathematics

2008-2010

Retired for Internship

Selected Coursework:

 $\textbf{Mathematics:} \ \ \text{Real Analysis} \cdot \ \text{Linear Algebra} \cdot \ \text{Logic} \cdot \ \text{Set Theory} \cdot \ \text{Differential Equations} \cdot \ \text{Number Theory}$ 

#### Work History

## Massachusetts Institute of Technology (MIT)

Visiting Research Student (October 2011 - Present)

#### Full-Time Research Assistant at CECI Lab

• Develop a remote lab using the iLab Shared Architecture

#### EAFIT University (Medellín, Colombia)

R+D In Computer in Education (October 2009 - Present)

#### Part-Time Research Assistant

- Develop a social network with Ruby on Rails for the University
- Develop a social network for the Colombian Ministry of Education called "Banco de Proyectos"
- Develop a Knowledge Management Community for TESAmerica (Colombian engineering organization). This project was fund by Colciencias (Colombian National Science Fundation)

# EAFIT University (Medellín, Colombia)

University Library (October 2010 - Current)

# Lead Developer

- Design and develop a Book-Trade social network
- http://truequeliterario.com/

#### EAFIT University (Medellín, Colombia)

SIRI Research Project (January 2008 - 2009)

#### Part-Time Research Assistant

- Develop a software that creates the Collatio from different editions of the same text.
- Tune-up the algorithm to compare long texts.
- Design and develop the UI for the software.

# EAFIT University (Medellín, Colombia)

Seminar for Programming Contest (January 2009 - Current)

# Director and Teacher

- Teach simple and advanced data structures
- Teach advanced algorithms for programming contest

# SKILLS

- Proficient in software development using C/C++ and Ruby.
- Proficient in Web Development using Ruby on Rails.
- Proficient in Test-Driven-Development and Behaviour-Driven-Development.
- Proficient with HTML, Javascript, Ajax and CSS.
- Familiar with Bash.
- Familiar with GNU/Linux and Mac OS X.
- Familiar with technologies such as Git and SVN.
- Familiar with Photoshop, Illustrator, Fireworks, Flash and Flex.

#### LANGUAGES

- Spanish Excellent (Native)
- English Excellent (TOEIC 920)

#### Contacts

Claudia Mara Zea Restrepo, M.Ed. (Universidad EAFIT)

Director of Proyecto 50, Center for Innovation and Technology in Teaching and Learning

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Juan Guillermo Lalinde Pulido, Ph.D. (Universidad EAFIT)

Professor of the Data Structures, Algorithms and Operating System lectures

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Helmuth Trefftz Gmez, Ph.D. (Universidad EAFIT)

Professor of Computer Graphics. Chair of Computer Science Department

• htrefftz@eafit.edu.co - (+57)301 371 41 32

## ACHIEVEMENTS

- ACM-ICPC World Finals, Orlando Florida, Participant, 05/27/2011 01/06/2011
- South American Contest ACM ICPC, Universidad de los Andes, Second place, 2010
- $\bullet\,$  National Programming Contest ACIS REDIS, Medellin Colombia, Eight place, 2010
- South American Contest ACM ICPC, Universidad de los Andes, Fifth place, 2009
- Third GEMIS-OE Programming Contest, EAFIT University, First place, 2009

#### Entrepreneur / Starter Projects @ Zinergia

Zinergia (Current)

Co-Founder and Lead Developer

Zinergia is a small business I founded about two years ago with a friend of mine. Right now we are a 6 people team (all students) that build web and mobile applications. You can find us on http://zinergia.co

## Latest Finished Projects

- Zinergia Website. Our company website. I was in charge of the HTML+CSS+JS (http://zinergia.co)
- Semar Motion Design. Website for motion artist Sebastián Mejía (http://sebasmejia.com)
- YKK Jen Colombia. Company and E-commerce website for a Zipper company. (http://ykkjen.com.co)
- IV Colombian Biotechnology Congress. Event website design and customization. (http://cuartocongresobiotecnologia.com/)
- Moda Rosa Centro Comercial. Website for clothing mall (http://modarosa.com.co/)

## PERSONAL PROJECTS

# Open Source Projects

All my open source projects can be found at my GitHub profile (https://github.com/nhocki/)

- Propose-it. Ruby on Rails application that helps us determine what should we do next. People propose something and the team votes for the next-iteration's work. (Project site: http://propose-it.heroku.com. Project Code: https://github.com/nhocki/propose-it)
- **Distributed-Tic-Tac-Toe**. A Distributed Tic Tac Toe game written in Ruby (with DRb) for a college project.(https://github.com/nhocki/Distributed-Tic-Tac-Toe)
- Collaborator at **Cómo Vamos?** Rails app to keep track of solutions to ICPC problems. (http://comovamos.factorcomun.org)
- Director. Sinatra-based app that will help you manage broken links when moving one application from one domain to another. (https://github.com/nhocki/Director)
- Make Permalink Gem. Ruby gem to create human and url friendly permalinks from an object method (https://github.com/nhocki/make\_permalink)