

Ella Rose

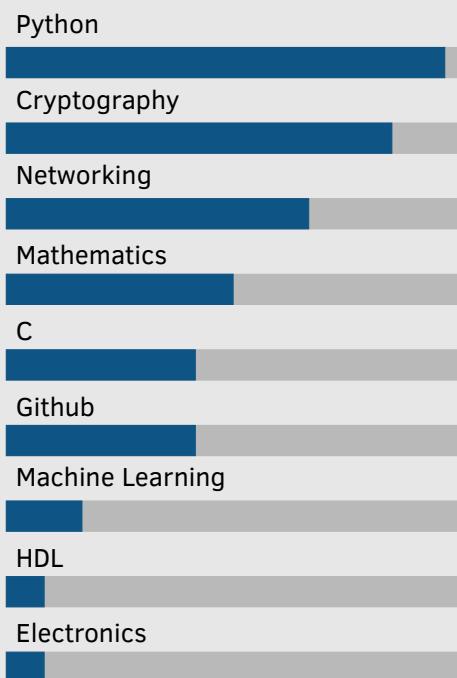
Software Developer
Consultant
Independent Researcher

-  27 years old
-  Enfield, NH, USA
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About me

An auto-didact and an expeditious learner, I am passionate about researching and working with technology. I am a top user on the cryptography stackexchange site, with over 100 answers and over 100,000 people reached.

Skills



(*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

Interests

I love algorithm design and information theory. I have interests in cryptography, mathematics, networking, computer science, digital signal processing, and hardware development. I like working with and solving hard problems. I approach software with a secure-by-default mentality.

Education

2015-Today	Independent Researcher Focus on Cryptographic algorithm design and analysis	Paso Robles, CA
2003-2007	High school Specializing in computers and electronics.	Paso Robles, CA

Experience

2013-Today	Software Developer Developer of an application framework for python	Paso Robles, CA
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Prior Work

Pride

I am the author an application framework for python that facilitates the development of fully featured applications for a minimum amount of code. I have developed apis for working with audio, gui, sockets/networking, database, and cryptography/security. One of my goals is to develop my own desktop environment and an app store built around it.

Cryptography

I have developed a novel trapdoor function and a public key cryptosystem built around it, as well as a fast authenticated-encryption-with-associated-data scheme. Additionally, my crypto package offers tools for cryptanalysis of symmetric algorithms.

Mathematics

I have familiarity and experience with the following topics: Number Theory, Abstract Algebra, Linear Algebra, Statistics, Combinatorics. I acquired my understanding of these subjects by working with them in relation to cryptography, in addition to reading about them.

Preferences

Operating Systems

I am comfortable with both Windows and Linux based operating systems.

Languages

I am a native english speaker with basic proficiency in spanish.

Relocation/Remote Work

I am willing to relocate and/or work remotely

Development Environment

I typically work with notepad++, though I recently started to work with vscode.