

# JPSmith

Student, Hacker, Adventurer

## about

17 Payne Place  
Normal, IL 61761  
United States

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github.com/japesinator

## languages

english  
basic spanish

## programming

Haskell  
Technical Writing  
Idris  
Python  
Go

## interests

functional programming, type theory, mathematics, information security, category theory, formal verification, technical writing, category theory, programming language theory, cryptography, vim

## education

- 2012–2015 **Part-Time Student** Illinois State University  
Mathematics through Complex Analysis  
Computer Science independent study and research
- 2010–2015 **Full-Time Student** Bloomington Central Catholic High School  
Focus on mathematics and the sciences
- 2014 **Stanford University** Online Student via Coursera  
Cryptography from Dan Boneh

## experience

- 2014 **Ingersoll Scout Reservation** STEM Director  
*Managed a staff of two and a building, taught more than 1,000 children.*
- 2013-2014 **The Katie School of Insurance and Risk Management** Researcher  
*Focused on machine learning and security in unmanned aerial systems, especially with regard to integration with businesses.*
- 2013-2014 **ISUSEC** Vice President  
*Taught students security concepts and practice, promoted meetings and events, and built capture the flag competitions*

## projects

- 2014 **TARTS** [github.com/japesinator/tarts](https://github.com/japesinator/tarts)  
Formally verified cryptosystems' resistance to timing attacks with the Curry-Howard isomorphism  
Applied to present at THOTCON 2015.
- 2014 **Fire\*** [github.com/mempko/firestr](https://github.com/mempko/firestr)  
Wrote documentation for a distributed system for computation and communication and then set up readthedocs for easy access and versioning.
- 2014 **The Idris Language** [github.com/idris-lang/Idris-dev](https://github.com/idris-lang/Idris-dev)  
Wrote part of the standard vector library, formally verified functors, applicatives, and monads, and part of the standard stream library