

# Daniel Cartwright

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## Work Experience

2017–Present **Programmer**, [Layer 3 Communications](#).  
Working on problems in network security with Haskell and Nix.

## Activities

2016– **Hobby**, [Open Source Programming](#).  
[diet](#) - Discrete Interval Encoding Trees (DIETs) in Haskell  
[silvi](#) - Haskell library for generating fake data  
[freq](#) - Cryptanalytic frequency analysis tool used to score domain names by validity  
[yubel](#) - High performance chess engine written in Haskell  
Ameybot - Fork of [GNU Go](#), an engine for [The Game of Go](#) that I ran on [The Computer Go Server](#) as well as [The Kiseido Go Server](#). Made adjustments to move generation and made additions to the shapes database resulting in roughly 100 ELO increase in playing strength.

2010–2014 **Club**, [University Interscholastic League - STEM](#), Member.  
Academic competitions organised by the University of Texas at Austin.  
Participated in [Calculator Applications](#), [Mathematics](#), [Number Sense](#), [Science](#), and [Computer Science](#).  
Placed State in 2011, Regionals in 2012, 2013, and 2014.

## Skills

Programming Haskell, Java, C#, C/C++, Python  
Software Linux (2 yrs), git  
Other Vim, L<sup>A</sup>T<sub>E</sub>X, NixOS