

# ariel weiss

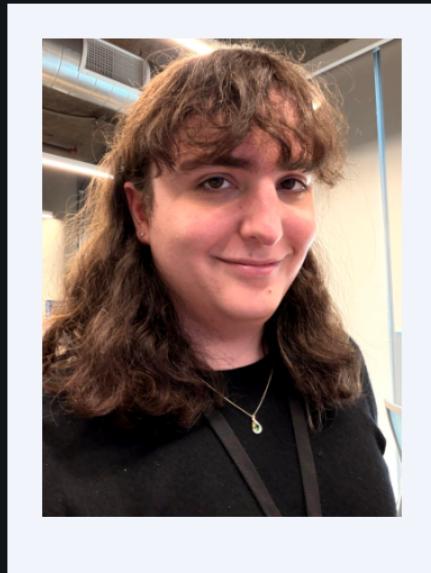
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hi, i'm ariel (she/her) from the [luau](#) team! i work as a software engineer and tech lead at [roblox](#) where my efforts are primarily focused on the design of and developer experience with [luau's](#) type system & ecosystem. its gradual type system is really quite fun, featuring powerful features like [semantic subtyping](#), [typestate](#), and [partial type operators](#).

outside of work, i'm a [fromsoft](#) fanatic, a frequent [magic the gathering](#) player, a chronic savage raider in the critically-acclaimed mmorpg [final fantasy xiv](#), and a lover of [dungeons & dragons](#), [lancer](#) & other [ttrpgs](#). in music, i'm a jazz and hyperpop appreciator, especially [samara joy](#) & [chet baker](#), and [jamie paige](#) & [brakence](#) & [underscores](#).

in other media, i adore classic cinema! some of my favorite films include [mulholland dr.](#) (2001) & [nora inu](#) (1949) & [taxi driver](#) (1976) & [à bout de souffle](#) (1960) & [in the mood for love](#) (2000). in television, i love to watch crime dramas, especially [the sopranos](#) & [breaking bad](#), and sci-fi anime like [ghost in the shell](#) & [witch from mercury](#) & [neon genesis evangelion](#).

in my past life, i was an academic. i was a phd student & nsf fellow at [northeastern](#) working on a formal semantics for [rust](#) with amal ahmed. as an undergraduate, i worked with [arjun guha](#) on static verification and program repair for [puppet](#) manifests.



## projects

### [lute](#) [cpp]

[lute](#) is a standalone [luau](#) runtime for general-purpose programming, aiming to enable developers to use luau for writing developer tooling and application code.

### [luau](#) [cpp]

[luau](#) (lowercase *u*, /'lu.au/) is a fast, small, safe, gradually typed embeddable scripting language derived from [lua](#). it is used as the official language for development on [roblox](#).

### [theraphosa](#) [ocaml]

[theraphosa](#) is a fully client-side, web-based environment for a small [python](#)-inspired functional programming language featuring a simple web ide with a compiler to [wasm](#).

### [diet coke](#) [scala]

[diet coke](#) is a simple functional language inspired by [koka](#) with a type-and-effect system featuring row-polymorphic effects and hindley-milner type inference.

### [the irc crate](#) [rust]

[the irc crate](#) is an asynchronous & usability-focused client library for the irc protocol. it aims to be compliant with [rfc2812](#), [ircv3](#), and popular ircds in use today.

## publications

### [Oxide: The Essence of Rust](#)

Ariel Weiss, Olek Gierczak, Daniel Patterson, Amal Ahmed.  
On arXiv, October 2021. **Awarded First Place in POPL '19 SRC.**  
[Extended Abstract \(POPL '19 SRC\)](#) [Poster \(Jan. 2019\)](#) [Slides \(June 2020\)](#)  
[Slides \(Jan. 2019\)](#) [Code](#)

### [Rust Distilled: An Expressive Tower of Languages](#)

Ariel Weiss, Daniel Patterson, Amal Ahmed.  
In *ML Family Workshop (ML '18)*, St. Louis, Missouri, USA, September 2018.  
[Talk](#) [Slides](#)

### [Tortoise: Interactive System Configuration Repair](#)

Ariel Weiss, Arjun Guha, Yuriy Brun.  
In *Proceedings of the 32nd IEEE/ACM International Conference on Automated Software*