

Vlad Kozin

Clojure, ClojureScript, JavaScript, OMeta, Racket, meta-programming
Fall'13 [Recurse Center](#) (aka Hacker School) alum

Corporate ladder

- Since 2015 *Programmer/Consultant* at [Droit](#) (New York, USA - remote)
Building an expert system for compliant trading. Sneaking Clojure/ClojureScript into unsuspecting financial giants. On any given day I could be designing DSLs, implementing compilers, parsers, rule-based engines, putting together simple browser-based GUIs and whatever else the startup life would have me do.
- 2014-2015 *Programmer* at [Yandex](#) (Moscow, Russia).
Officially a member of *Search Interfaces Development Infrastructure* group, but mostly I write backend tools that perform source to source compilation: parse, transform and generate code. Any given project will inevitably depend on: [ometajs](#), [esprima](#), [estraparse](#), [uglify-js](#), [escodegen](#), [xjst](#). If I'm lucky and do it right frontend developers get to use my work and get all the credit.
- 2009-2011 *Equity Derivatives & Structured Products Sales* at [Renaissance Capital](#) (Moscow, Russia).
2007-2009 *EM Structured Solutions and Derivatives Sales* at [Barclays Capital](#) (London, UK).

Projects

- Racket *Author* of [ometa-racket](#), a mostly complete Racket implementation of [OMeta](#) - OO pattern-matching language that extends PEGs with ability to handle left-recursive rules and match structured data.
Author of [skish](#), a mostly futile attempt at porting Olin Shivers' wonderful [scsh](#) to Racket. [scsh](#) is a non-interactive Unix shell embedded within Scheme (originally Scheme48).
- Clojure *Author* of several closed-source products: [FpML](#) message parser, financial derivatives classifier based on ISDA taxonomies, legal annotation tools, etc.
- JavaScript *Author* of [bemhtml-syntax](#), a syntax converter for [BEMHTML](#) - an XSLT inspired templating language - part of [BEM methodology](#) of frontend development.
Author of [bemhtml-source-convert](#), a *best effort* compiler from [BEMHTML](#) templates to [BH](#) templates.
Author of [xjst-more](#), an [XJST](#)-based compiler for [BEMHTML](#) templates that facilitates incremental compilation of templates potentially on the Client. WIP.
Contributor to [ometa-js](#), a JavaScript implementation of [OMeta](#).
Contributor to [bem-xjst](#), [XJST](#)-based compiler for [BEMHTML](#) templates.
- Emacs Lisp *Author* of [jslime](#), a minor mode that sends JavaScript code to Node.js repl - silly little thing with very few features that does make iterative JavaScript development in Emacs sane.
Contributor to whatever little thing I find annoyingly broken in my daily Emacs use. Could be bug reports or tiny fixes to upstream packages.

Formal education

- 2004-2006 [Keldysh Institute of Applied Mathematics](#) (Moscow, Russia)
PhD track in Applied Mathematics, dropped out
- 1999-2004 [Lomonosov Moscow State University](#) (Moscow, Russia)

Autodidacticisms

- 2012 [How to Design Programs](#) by Matthias Felleisen et al.
How I was introduced to programming. [Assorted solutions to HtDP](#).
- 2012 [Programming Languages](#), [Certificate]
Brown University
How I was introduced to creating PLs. Taught by [Shriram Krishnamurthi](#) based on his wonderful [PLAI](#) text. [My solutions](#) - a sequence of interpreters for progressively more complex languages: all the way to OOP, CPS transforms and type checkers.
- 2014 [Hardware/Software Interface](#), [Certificate 89.6%]
University of Washington for Coursera
How I was introduced to systems programming. Essentially an Introduction to Computer Systems course as taught at Carnegie Mellon with the same course-load and text [Computer Systems: A Programmer's Perspective](#) by Bryant and O'Hallaron.
- 2014 [Paradigms of Computer Programming 1](#), [Certificate1 94%]
[Paradigms of Computer Programming 2](#), [Certificate2 97%]
Université catholique de Louvain for edX
How I was introduced to concurrency, multi-paradigm programming and delightful paradigms that so far seem to exist only in academic setting. Taught by [Peter Van Roy](#) and is based on his classical [Concepts, Techniques, and Models of Computer Programming](#).
- 2015 [Introduction to Probability](#), [Certificate 94%]
MIT for edX
Because it's awesome.

Languages

- Russian, English Equally comfortable with both.
- Clojure What I get to use for my current projects.
- Racket Favorite Lisp. Would be my weapon of choice were such choice ever offered.
- JavaScript Wrote fair amount, mostly backend compiler stuff with Node.js.
- OMeta Extensive experience writing parsers and fairly complex grammars.
- Emacs Lisp Unavoidable Lisp.
- Java Enough to write a Clojure wrapper with necessary bindings and avoid writing more Java.
- C Enough to pass a systems programming class but not nearly enough to actually use it.
- Factor, OCaml, F# Toyed with but never mastered in earnest.

Activities and interests

Most of my activities and interests these days involve boxes with lights and buttons. Even so there were reports of me cycling, bouldering, surfing, roller-skating, skiing and more. Having owned a sports car I'll choose a bicycle every time.

Lived in the UK, US, Hungary and far more exotic places. Crossed the US from Mexico to Canada twice with the current state count of 19.