

# Vlad Kozin

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

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## Corporate ladder

- Since 2014 *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](#), [estraverse](#), [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 FpML related products: FpML message parser, financial derivatives classifier based on ISDA taxonomies.
- 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 [projectile](#), a tiny fix for [persp/projectile](#) when used with Helm.

## 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)  
*MS in Theoretical Mechanics and Applied Mathematics.*

## Autodidacticisms

- 2012 [How to Design Programs](#) by Matthias Felleisen et al.  
How I was introduced to programming. [Assorted solutions to HtDP.](#)

2012	<p>Programming Languages, [Certificate] Brown University</p> <p>How I was introduced to creating PLs. Taught by <a href="#">Shriram Krishnamurthi</a> based on his wonderful <a href="#">PLAI</a> text. <a href="#">My solutions</a> - a sequence of interpreters for progressively more complex languages: all the way to OOP, CPS transforms and type checkers.</p>
2014	<p>Hardware/Software Interface, [Certificate 89.6%] University of Washington for Coursera</p> <p>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 <a href="#">Computer Systems: A Programmer's Perspective</a> by Bryant and O'Hallaron.</p>
2014	<p>Paradigms of Computer Programming 1, [Certificate1 94%] Paradigms of Computer Programming 2, [Certificate2 97%] Université catholique de Louvain for edX</p> <p>How I was introduced to concurrency, multi-paradigm programming and delightful paradigms that so far seem to exist only in academic setting. Taught by <a href="#">Peter Van Roy</a> and is based on his classical <a href="#">Concepts, Techniques, and Models of Computer Programming</a>.</p>
2015	<p>Introduction to Probability, [Certificate 94%] MIT for edX</p> <p>Because it's awesome.</p>

## 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	Fair amount of experience especially writing Node.js backend applications.
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 the systems programming class.
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.