# Jeremy Lucas



## Work experience

**Lab Instructor, Part-time** - [Hackbright Academy](https://hackbrightacademy.com/) (June 2016-present)

Will be teaching "Introduction to Programming" in evening classes

**Lead Engineer, Platform** - [URX](https://www.crunchbase.com/organization/urx) (October 2013-April 2016)

As an early engineer, I built out and have maintained several different systems up and down the stack:

* First-gen ad retargeting server
* First-gen feed processor and creative generator
* URX API server
* URX client SDKs
* Data ingestion pipelines for near-real-time API log data
* Automated tracer bullets for data processing systems
* First-gen crawl data indexer
* Core elastic coordination framework for in-house distributed web crawler

**Senior Software Engineer, Traffic Acquisition** - [Connexity, formerly Shopzilla, Inc.](https://connexity.com) (September 2011-October 2013)

**Web Application Developer, Internship** - [Wet Seal](http://wetseal-llc.com) (November 2010-September 2011)

## Open source

[**Spark**](https://github.com/apache/spark)

Contributed a way to notify Spark streaming jobs of unhandled executor processing failures and exceptions.

[**Kafka-Python**](https://github.com/dpkp/kafka-python)

Contributed a compatibility layer for support Java-Xerial-based Snappy encodings in Kafka consumers.

[**Rift VM**](https://github.com/jerluc/rift-ng)

An experimental programming model to generalize IoT applications around P2P principles through the use of location-transparency, physical service discovery, and remote dispatch primitives.

## Talks

[*"Rift VM"*](http://slides.com/jerluc/r) (October 2015)

An introduction to the Rift VM, including both the high level goals of the project and some of the nitty-gritty internals.

[*"Connecting wearable devices to the Physical Web"*](https://web.archive.org/web/20150703092017/http://www.wearablestechcon.com/classes#ConnectingWearableDevicestothePhysicalWeb) (March 2015; [slides](https://docs.google.com/presentation/d/1DIjxwMXz1SeWu9cjob0UwVY9teffEPUVxeMnC47ybqs/edit#slide=id.p); [code](https://github.com/jerluc/physical-web-wearable-demo))

Today, wearables are a demand-based platform. Users ask questions via voice commands or tapping through menus to find information. And while devices understand our GPS location, they aren’t aware of what’s around us to provide a truly relevant experience.

In the near future, we will be able to establish context in the real world with Bluetooth beacons. We’ll be able to see a restaurant menu when we walk by or check bus times and routes when at a stop. With the physical Web, we can use real-world context to drive an improved user experience. In this class, we will walk through building location-aware apps and discuss the tradeoffs that impact user experience.

[\*"Practical Programming - Manipulating data"](http://slides.com/jerluc/practical-programming-manipulating-data) (July 2014)

The second part to the programming primer. This section focuses on data manipulation, going through working with basic data structures such as lists, sets, and dictionaries, and then moving into actual I/O operations on both structured and unstructured files.

[\*"Practical Programming - A brief introduction"](http://slides.com/jerluc/practical-programming-a-brief-introduction) (June 2014)

An introductory course to programming meant for power users. Offers a brief overview of various rudimentary programming concepts such as variables/symbolic bindings, control structures, and functions/routines.

[*"Hadoop's elephant in the room"*](http://www.ustream.tv/recorded/30895921) (April 2012; [code](https://github.com/shopzilla/hadoop-in-a-box))

In this talk, we'll venture through the not-so-talked-about ideas with which you can ameliorate the quality confidence in your Hadoop apps, both for bullet-proofing mission-critical data processing and for supporting broad data experimentation and discovery.

### Education

**Saddleback College** General computer science courses 2007-2011