CARLTON SCHUYLER   carl@dragnon.com   +1 305.606.6672

I AM: An Experienced, Constantly-Learning, Generalist Software Engineer.

- Recent Tech: Java 8, Kotlin, Spring, Python, Clojure, REST, Swagger, Kafka, Gitlab, Docker, Pivotal Cloud Foundry, SQL, ORM, Elasticsearch, IntelliJ.

- A believer in automation; CI/CD; practical QA; code quality: repl-driven, interactive development; SOLID principles; OO and functional programming; tools; metrics and monitoring; patterns.

- A mathematician, linguist, and computer scientist by education.

- Some things on my Tech Radar: Functional and Reactive paradigms, DSLs, the Semantic Web, Ontologies and Graph Databases, Cloud platforms, Big Data, Machine Learning, Visualization and Infographics, Natural Language Processing, Deep Learning.

- An avid traveler, conference junkie, polyglot, and experiential foodie.

WORK

[09/2017 - present] Lead Developer, ThoughtWorks, Denver, Colorado (100% travel to client sites)

Currently I write microservices in Kotlin and Java in the Mobile application stack, for a large grocery retailer. The main task is to transform legacy code into a modern architecture consisting of Core and BFF (Backend for Frontend) services. Stack: SpringBoot, Cassandra, Gitlab, Pivotal Cloud Foundry, ELK.

Prior to that, I was one of two senior developers on a DevOps project at a large financial services company. We helped modernize/create the new incarnation of the corporate development and runtime infrastructure. One major delivery alleviated the largest of numerous developer pain points: Automating the process of service account creation, database permission granting, and credential vaulting. Stack: Kubernetes, OpenShift, Linux, CyberArk, Java, Spring Boot, Python, Ansible.

About ThoughtWorks: We operate by embedding teams (in North America, we are generally co-located with client teams), providing high-value-added bespoke software services. Projects require mastery of not only variety of platforms, processes, languages, etc., but also consulting skills. More details at: https://www.thoughtworks.com/about-us

[07/2010 - 08/2017] Sr. Software Engineer, CA Technologies (was Rally Software), Boulder, Colorado

At Rally/CA, I was always full-stack, and multi-roled, meaning in addition to "just coding", I did ops-y things like deployment, monitoring, and support, and tried to make our lives better, by dabbling in Docker at the beginning of its quick rise, for example.

Most Recent Project: Search service for a SaaS app with a complex domain model. Microservices in Clojure, using Elasticsearch as a backend. The entire system was underpinned by object change events delivered through Kafka. Most notable effort in the project: Modeling the search documents in a way to reflect the structure of the domain model (Enterprise Agile Project Management), while still achieving quality results (precision and recall).

Prior Project: Primarily back-end webapp development: Refactoring, breaking out microservices, and a variety of performance tuning. This application was notable for its very user-customizable domain model, and rich REST API. Stack: Java 8, Spring, Clojure, Kafka, OS libraries, and an ORM named EclipseLink (which is like Hibernate, but different).

Prior Project: Object Change Message and Notification services:

- Unobtrusively collect changes directly from Oracle; put them on Kafka.
- Store history and compute differences, with Datomic and Clojure.
- Process and notify interested parties with a homegrown rule engine, in Clojure.
- Full-stack functional tests, in Clojure (including test.check: generative testing).

[12/2009 - 6/2010] Independent contractor (sub to **ThoughtWorks**), **eBay** (King of Prussia, PA)

(eBay acquired GSI in 2011). Added In Store Pickup functionality to a number of large retailer web sites, with GSI employees. Facilitated Agile practice adoption. Java, Spring, Struts, Hibernate, JUnit, Maven.

[10/2009 - 12/2009] Senior Engineer, Overstock.com (Salt Lake City, UT)

Worked on the Overstock.com site: Additions, enhancements. Java, Javascript, SQL.

[3/2009 - 8/2009] Architect, RivetLogic (San José, Costa Rica)

Set up new offshoring office, and lead RivetLogic presence in Costa Rica: mentor, evangelize, manage operations and HR, etc. Also, provided development services to clients in the Enterprise Content Management Open Source space.

[09/2007 - 03/2009] Senior Consultant, ThoughtWorks (San Francisco, CA)

Contracting to a large retail clothing retailer. Product: An internal code quality dashboard suite: A custom collection of visualizations of various code quality metrics: coverage, complexity, cohesion/coupling, test status, etc.

- In order to provide insight into Continuous Improvement, the systems allowed separation of new code from legacy, and point-in-time and change-over-time views of the statistics.
- Built using Ruby on Rails, with a significant amount of custom SQL. Also involved heavy customization of the CI pipeline, using Maven and Ivy.

[04/2007 - 09/2007] Lead Developer, DeepData (telecommuting)

Part of an international team working on Local Listings data production. Used a variety of text processing and statistical techniques in Ruby and PostgreSQL, to process semi-structured data (business and residential listings).

[03/2006 - 11/2006] Senior Research Engineer, Ask.com (Oakland, CA)

Built "Ask Local": a maps, locale, and reviews search engine. Freedom to experiment and implement in an R&D environment. Information Retrieval, ranking algorithms for vertical (faceted) and geographic search; web crawling.

[09/2005 - 03/2006] Office Lead and Developer, Aplicor (San José, Costa Rica, and Boca Raton, FL)

Set up a new offshoring office for a US-based startup, in my longtime home-away in Costa Rica. C#, hosted CRM application.

[10/2003 - 09/2005] Lead Developer, Horizon 20 (San José, Costa Rica)

Coding in a variety of technologies (ASP, C#, SQL) in a realtime environment (offshore betting websites).

[09/2001 - 10/2003] Team Lead, Intel (San José, Costa Rica)

Wrote a large chunk of C++ to implement a custom solution to an ETL problem. Worked closely with colleagues in Sacramento. Also, wrote doshboards for project management in .Net and C#.

[10/1998 - 03/2000] Senior Developer, **CGI (was AMS)** (Düsseldorf, Germany)

Very large project (200 developers) to build a CRM and billing package for a large telecom firm. C++, constraint-based and rule-based programming using Ilog. Learned German.

[03/1996 - 10/1998] Consultant, **ERS** (Northern Virginia)

We were consultants with a bent towards Rule Based Systems. Had the opportunity to build systems using CLIPS, Ilog Rules, and Java.

[06/1993 - 03/1996] R&D Developer, **TASC** (Reston, VA)

Natural Language Processing: doing fact extraction from newswires for domain specific subject matter analysis. Participated in TREC and MUC. Lex, YACC, C, Perl, VB, Tcl/Tk.

SCHOOL

[03/1993] Ohio State (Columbus, OH) - M.S., Computer and Information Science, plus many hours in the Linguistics department, and an at-home Hungarian language correspondence course.

[05/1991] Tufts University (Somerville, MA) - B.A. in Mathematics, and B.S., *cum laude*, in Computer Science. Also: learned Russian.

[01/1991] Budapest Semesters in Mathematics [through St. Olaf College in Minnesota] - Semester in Hungary (one of the best known countries for theoretical mathematics). Also, learned Hungarian.

[06/1987] The International School of Brussels - USA high school and International Baccalaureate diplomas, with honors. Learned French.

LANGUAGES (HUMAN)

Fairly fluent in **Spanish** and **French**, due to residence in Costa Rica and Belgium for several years. I'm an avid polyglot, and am at various stages of learning a few others. The "main" others as of now are: **German, Russian, Hungarian**, and **Portuguese**.