

# TAN QUACH

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An independent software designer, consultant and application architect with over 15 years of experience in all facets of software development. Strong proponent of open-source software with prior contributions.

Specializing in platform and API development with a focus on Internet scalability.

**Primary skills:** Go, Python, Scala, Java, Ruby

 [hello@tanquach.com](mailto:hello@tanquach.com)

 [@tantastik](https://twitter.com/tantastik)

 [github.com/tantastik](https://github.com/tantastik)

 [bitbucket.org/tquach](https://bitbucket.org/tquach)

## PROJECTS

Selected examples of recent development projects underway or completed.

### APACHE BUILDR

Ruby, RSpec, Hg  
[buildr.apache.org](http://buildr.apache.org)

Contributed an extension to the Apache Buildr project for performing releases with Mercurial VCS. Included RSpecs and unit tests.

### TALENT CURATOR

Python, Flask, SQLAlchemy, OAuth  
[github.com/tantastik/talent-curator](https://github.com/tantastik/talent-curator)

Python app accessing Google Drive using OAuth2. Simple persistence using SQLAlchemy.

### GOLANG-REST

Go, Mongo DB, REST  
[github.com/tantastik/golang-rest-server](https://github.com/tantastik/golang-rest-server)

REST-based resource retrieval using Go and Mongo DB.

### COUCHBASE-PLAY-PLUGIN

Scala, Couchbase  
[bitbucket.org/tquach/play-couchbase](https://bitbucket.org/tquach/play-couchbase) (private)

Proof-of-concept Play framework plugin written in Scala to demonstrate connecting to a Couchbase cluster node. Based on ReactiveMongo-Play plugin.

## RECENT EXPERIENCE

**CROWDSURGE**

CROWDSURGE

Dec 2013 – Current  
New York, NY

Platform Architect & Principal Engineer

- Produce architecture blueprint for next generation ticketing platform and e-commerce store.
- Run workshops and talks on Go programming for technology group.
- Design and implement OAuth service provider and API access management.
- Design and implement REST-based micro-services using Go, Mongo and Redis.
- Developed high-performance user and RBAC customer data management service.
- Establish coding standards and best practices for technology group.
- Establish load testing and performance best practices using Gatling.
- Mentor and coach junior developers through TDD and pair-programming.
- Technologies: Go, Python, Scala, Mongo, Redis



## NURUN

June 2013 – Dec 2013  
Toronto, ON

### Solutions Architect

- Engage in research and analysis for large retail e-commerce systems such as Walmart.ca.
- Design and document large-scale gift registry web application based on Scala, Oracle and MongoDB.
- Produce solution architecture artifacts for designing Internet-scale applications.
- Design a content acquisition system using Scala Akka library for transforming static content to indexed and searchable content in Endeca.
- Validate software architecture blueprint designs with proof-of-concepts and spikes.
- Evaluate replication techniques for various NoSQL databases such as Mongo and Couch.
- Produce conceptual and logical data model designs for polyglot data persistence.



## CAPCO / TD-MBNA

Dec 2012 – Mar 2013  
Toronto, ON

### Solutions Architect

- Produced high-level solution design artifacts for integrating MBNA and TD banking systems.
- Assembled architectural blueprints for integrating existing banking systems through SOAP.
- Designed and implemented a Java-based web app integrating several critical banking systems.
- Managed team of software engineers to build an enterprise solution for document management.
- Performed DevOps tasks to set up build environment and development environment.
- Technologies: Java, Spring, Hibernate, Maven, EJB3, SOAP, IBM WebSphere,



## POLICYEXPERT.CO.UK

Sep 2012 – Dec 2012  
London, UK

### Principal Consultant

- Engaged to provide management consulting services to C-level executives.
- Managed talent acquisition initiative to rapidly build a high-caliber software engineering team for all roles, including DevOps, QA Engineer, Java Developers and Front-end Developers.
- Devised coding tests for evaluating applicant technical skills and capabilities for all disciplines.
- Provide high-level technical solutions through proof of concepts and prototypes (see Github account).
- Deliverables: technical hiring workflow, recommendations for retention and software delivery best practices.



## POINTS INTERNATIONAL LTD.

July 2011 – Aug 2012  
Toronto, ON

### Principal Engineer

- Provide technical leadership through coaching and training of development staff.
- Designed and developed a JavaScript SDK for transferring frequent flyer miles on client websites.
- Designed and developed Python applications as proof of concepts for CRM applications.
- Liaise with business and product management team to produce rapid prototypes of new applications.
- Delivered presentations and talks regarding API security design and in-depth analysis of OAuth protocol.
- Produced technical solutions for platform projects, providing direction on what programming language, libraries or frameworks to use for new projects.

- Produced whitepaper on API Design Principles as well as working prototypes for leadership team.
  - Hired, trained and directly managed two other Principal Engineers.
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## P A S T   E X P E R I E N C E

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2009-2011 BODOG.COM – TECHNICAL LEAD, E-COMMERCE (JAVA)  
2009-2009 NURUN – TECHNICAL ARCHITECT  
2008-2009 AFFINITY SYSTEMS – LEAD APPLICATION DEVELOPER (JAVA)  
2005-2008 BODOG.COM – SENIOR DEVELOPER / TECHNICAL LEAD, E-COMMERCE  
2004-2005 UNIVERSITY OF BC – SYSTEMS ANALYST  
2002-2004 PHANTOM FIBER – SERVER-SIDE JAVA DEVELOPER

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## E D U C A T I O N

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### UNIVERSITY OF WATERLOO

*Bachelor of Math, Honours Co-op, Double Major in Computer Science and C&O*