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# LELAND JANSEN

BSc Computer Engineering  
University of Alberta  
Class of April 2019  
GPA 3.5/4.0 (2016)

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[www.lelandjansen.com](http://www.lelandjansen.com)  
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## EMPLOYMENT

### Software Engineering Intern, Google

May – August 2017

- AdsCrawl team member developing backend logic and infrastructure to optimize the rate at which Ads data is processed.
- Developed *Lightbulb* service from start to finish in three months including design, implementation, testing, and deployment. Processes  $O(100k)$  requests per second.
- Reduced request rejections between two internal services by 6.1x and compresses std dev by 5.0x.
- Allowed upstream service task count to scale without disproportionately increasing request rejections.

[www.lelandjansen.com/google](http://www.lelandjansen.com/google)

### Software Developer Co-op, Zaber

January – April 2017

- Member of Firmware and Electronics team developing software to interface with Zaber's precision motion control products.
- Developed three customer-facing features during four-month placement: custom autocomplete text field, new software installer, and crash-reporting system including client and backend logic.

[www.lelandjansen.com/zaber](http://www.lelandjansen.com/zaber)

### Developer Intern, Shopify

May – August 2016

- Member of Production Engineering's Traffic team developing reliable and scalable networking infrastructure to serve high-volume *flash sales*.
- Pioneered tooling framework to automate server tasks and interfaced with ChatOps bot.
- Presented tools to production engineering *Shopifolk*, now used on a daily basis.
- Co-authored Chef configuration to move non-core services to new load balancers.

[www.lelandjansen.com/shopify](http://www.lelandjansen.com/shopify)

## PROJECTS

### Fatigue

- Native iPhone application for geophysical-survey pilots to self-assess their fatigue level.
- Features programmatic UI with intuitive data entry mechanism.
- Employs graph theory algorithms and data structures to represent questionnaire.
- Commended for attention to detail and high level of polish.

[www.lelandjansen.com/fatigue](http://www.lelandjansen.com/fatigue)

### Quantus

- Distance measurement device for high school and university physics labs (embedded system).
- Reduced speed-of-sound algorithm runtime by 67.7% using calculus-derived linear approximations.
- Designed all project components including software/firmware, tooling, circuit board, and brand.

[www.lelandjansen.com/quantus](http://www.lelandjansen.com/quantus)

### ScaleBook

- Musical scale website for pianists studying for technical component of examinations.
- Custom natural language processing algorithm interprets user queries with 99% accuracy.
- Developed music algorithms to compute note sequence, key signature, and relative scale information in lieu of querying a database.

[www.lelandjansen.com/scalebook](http://www.lelandjansen.com/scalebook) | [www.scalebook.org](http://www.scalebook.org)

## LANGUAGES AND FRAMEWORKS

- Advanced proficiency in C++ and Python.
- Experience with Assembly, C, CSS, C#, Java, JavaScript, Mathematica, MATLAB, Ruby, and Swift.
- Experience with AngularJS, Bash, Chef, CocoaTouch, Git, gTest/gMock, .NET, NUnit, RSpec, and WPF.
- English (native), Spanish (advanced).

## COMPLEMENTARY SKILLS AND INTERESTS

- Dedicated CrossFit athlete (2013 – present) training 5 days/week.
- Level 8 Piano with first-class honors (Royal Conservatory of Music, 2013).
- Composed several original piano pieces.

[www.lelandjansen.com/crossfit](http://www.lelandjansen.com/crossfit) | [www.lelandjansen.com/music](http://www.lelandjansen.com/music)

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