
LELAND JANSEN

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

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EMPLOYMENT

Software Engineering Intern, Google May 2017 – August 2017

- Member of AdsCrawl team working on backend logic and infrastructure to optimize the rate at which Ads data is processed.

www.lelandjansen.com/google

Software Developer Co-op, Zaber January 2017 – April 2017

- Member of Firmware and Electronics team developing software to interface with Zaber's high-precision motion control products.
- Created autocomplete text field allowing users to quickly send instructions to Zaber devices.
- Developed automatic-update feature when implementing a new installer for *Zaber Console*.
- Built crash reporting system including client-side and backend logic to collect error metrics.

www.lelandjansen.com/zaber

Developer Intern, Shopify May 2016 – 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

PROJECTS

Fatigue

- Native iPhone application allowing pilots to self-assess their fatigue level.
- Features programmatic UI with intuitive data entry.
- Employ graph theory algorithms and data structures to represent fatigue questionnaire.

Quantus

- Distance measurement device for high school and university physics labs (embedded system).
- Developed polymorphic finite-state machine to model device behavior and simplify code logic.
- Reduced speed-of-sound algorithm runtime by 67.7% using calculus-derived linear approximations.
- Designed all project components including software/firmware, tooling, user tests, circuit board, manufacturing process, and business strategy.

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ScaleBook

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

www.lelandjansen.com/scalebook | www.scalebook.org

LANGUAGES AND FRAMEWORKS

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

CONTESTS

- UAPC Programming Contest: Team of three placed 4th out of 26 teams in Division 1 (2017) .
- Microsoft College Code Competition: Team of three tied for 2nd place out of ~40 teams (2016).

COMPLEMENTARY SKILLS AND INTERESTS

- Avid CrossFit athlete (2013 – present).
 - Achieved Level 8 Piano with first-class honors (Royal Conservatory of Music, 2013).
Written several original piano compositions.
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