

# Brian Tran

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## Employment

### NetIQ

Houston, TX

#### SOFTWARE ENGINEERING INTERN

May 2017–Feb 2018

- Improved and maintained Java/Groovy TestNG suite, using Selenium web browser automation, which flagged bugs in product's UI and REST APIs for development team to correct
- Developed test class that verifies product displays correctly in 11 locales by reporting detected language confidence levels from Google's Cloud Natural Language API, guiding team towards untranslated/mistranslated HTML elements
- Optimized test class by implementing parallelism, headless browsers, and authentication via HTTP request methods to set login cookie on browser's WebDriver, which improved performance in these areas 10x

### University of Michigan

Ann Arbor, MI

#### ASSISTANT IN RESEARCH

May 2017–Aug 2017

- Ran user study comparing usability of configuring Linux web servers to serve content over HTTPS: one, using EFF's Certbot, and two, manually requesting, verifying, and installing SSL/TLS certificate—identifying and quantifying pain points of HTTPS deployment

### Rice University

Houston, TX

#### RESEARCH ASSISTANT

May 2016–May 2017

- Programmed and deployed responsive, open-source web application for ranked-choice election research using React JavaScript library and Firebase Realtime Database to A/B test 3 unique user interfaces, identifying which performed better in user studies
- Designed and built open-source “smart” ballot box run by Arduino board, Raspberry Pi, and printed circuit board (PCB), programmed in C, Python, and Java, that scans incoming ballots for valid barcodes and diverts invalid ones to a rejection chute, securely recording receipt of ballots for prototype electronic voting system
- Implemented ballot box status broadcasting over the local network, using webhooks, to provide accessible audio and visual feedback to voters
- Collaborated with and communicated technical details to team of security experts, human factors experts, and election officials to integrate their diverse domain knowledge into design

### Lithium Technologies

San Francisco, CA

#### IT INTERN

Jun 2015–Jan 2016

- Helped automate laptop and cloud account setup and provisioning, which reduced errors and freed team resources
- Provided onsite and remote help desk support to 500+ employees through Zendesk ticket system, leading user through diagnostic procedures to identify, isolate, and resolve source of problem

## Skills

Languages	JavaScript, Java, Python, C++, Bash
Web	Node.js, React + Redux, CSS (Bootstrap, Material Design Components), HTML
Knowledge	User Interface (UI), User Experience (UX), rapid prototyping, Amazon Web Services (AWS Lambda), basic relational databases (SQL), NoSQL (DynamoDB, Firebase Realtime Database), Agile

## Projects

### Time synchronized comments for YouTube

Houston, TX

#### HACKRICE

Jan 2016

- Deployed video player that synchronously displays time-stamped comments (e.g. “Amazing music at 0:35”) with the associated YouTube video (like SoundCloud comments) using YouTube Data API and regular expression filtering

## Education

### Rice University | COURSEWORK IN COMPUTER SCIENCE

Houston, TX

Relevant coursework: Algorithmic Thinking, Probability and Statistics, Election Systems

### Wilcox High School | DIPLOMA

Santa Clara, CA

## Activities

#### RICE UNIVERSITY COMPUTER SCIENCE CLUB

#### ACM INTERNATIONAL COLLEGIATE PROGRAMMING CONTEST