# **DHARIT TANTIVIRAMANOND (REED)**

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### **WORK EXPERIENCE**

#### LOCAL DIALECT LLC QUEENS, NY

Electronic Music Producer & DJ, 2017 - Present

- Self-taught audio production, synthesis, and recording using Ableton as well as hardware equipment.
- Released over 40 tracks on various labels such as Zerothree, Realm (Gorgon City), Purified (Nora En Pure), Ein2 (Einmusik), with an upcoming release on Stil Vor Talent.
- Performed numerous DJ sets at venues such as The Brooklyn Mirage, Shrine LA, and Hard Rock Hotel San Diego.
- Manages Local Dialect's social media presence, budget, and logistics.
- Teaches 1-on-1 audio production lessons.
- Built and tested web visualizers for use during livestreams using p5.js and WebMidi.

#### PURE STORAGE MOUNTAIN VIEW, CA

Software Engineer (IO Path Team), Aug 2015 - May 2019

- Worked on increasing the write rate to flash storage modules inside Pure Storage's FlashArray product by optimizing the write path of Purity, Pure Storage's C++ software infrastructure.
- Participated in data corruption investigations that occurred on internal testbeds to catch critical bugs before they manifested on customer arrays.
- Tested a new Quality-of-Service feature that ensured large-scale write operations across an unprecedented size of 5000 volumes wrote to each volume evenly and avoided write-starvations and timeouts.
- Tracked and analyzed performance regressions across every type of FlashArray product.
- Built Python infrastructure to automate the process of pinpointing the cause of a regression by bisecting git commit history.

### TINTRI MOUNTAIN VIEW, CA

### R&D Intern (Filesystem Team), 2014

Optimized the Tintri filesystem directory table recovery by using persistent unordered maps to allow instantaneous and on-demand file operations, thereby reducing the filesystem boot times.

# PRINCETON TERRACE CLUB PRINCETON, NJ

Treasurer, 2013 - 2014

Budgeted Terrace Club's \$230,000 social fund throughout the school year and organized events including formal dinners, members' nights and live music shows.

### **EDUCATION**

#### PRINCETON UNIVERSITY

PRINCETON, NJ

Bachelors of Arts in Computer Science with Honors GPA: 3.49

#### THESIS PROJECT

Worked with Professor Jeffrey Snyder on the Birl Project:

- Developed a realtime physics-based simulation of a wind instrument with continuous tone-hole coverage inputs, as opposed to existing models which only allow tone-holes to be either fully open or fully closed.
- First of its kind to allow techniques like halfholing, overblowing, and multiphonics with this type of physical modeling synthesis.
- Devised a tuning system to tune the model to any arbitrary scale using variable tonehole sizes to compensate for integer-length delay lines. Utilized a novel approach using integer-length delays instead of fractionallength to avoid tuning imperfections.

# **TALKS & PUBLICATIONS**

Authored a paper and gave a presentation based on contributions to the Birl Project at the 2017 International Symposium on Musical Acoustics (ISMA) conference, held at McGill University, Montreal, Canada. <u>Links to paper</u> and <u>conference proceedings here.</u>

#### **SKILLS**

# **Programming Languages**

Python, Javascript, C, C++, Java

#### **Tools & Frameworks**

React, Tailwind, Vim, VSCode, gdb, git, p5.js

#### **Audio Production**

Ableton, Bitwig, Max/MSP, Chuck

# Language Capabilities

Fluent in English, Thai, Lanna (Northern Thai dialect).

Proficient in Mandarin.