

DREW SOMMER

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(619) 952-2347

ANDROID DEVELOPER

2+ years experience developing Android applications with Java, and
8+ years experience designing simulation software as a mechanical engineer.

SKILLS

- ✓ Technical Lead
- ✓ Mentorship
- ✓ Project Management

PROFICIENT

- ✓ Android SDK
- ✓ Java
- ✓ Python

LEARNING

- ✓ Kotlin
- ✓ React
- ✓ Flutter

RECENT EXPERIENCE

ANDROID ENGINEER BARAUDIO LLC

JUNE 2019 – PRESENT

- PLAY STORE: BarAudio is currently released on the Play Store using a subscription model, written in Java.
- GOOGLE CLOUD PLATFORM: Firebase data management with Google and Facebook sign-in providers.
- ACCESSIBILITY: Text-to-speech processing of user configured alert strings and realtime API stock data.
- MATERIAL DESIGN: A foreground service complements the modern and artistic UI, for API > 21.

DATA STRUCTURES AND ALGORITHMS UDACITY NANODEGREE

JUNE – OCTOBER 2019

- DATA STRUCTURES: Detailed study of the most common data structures in computer science: arrays, lists, stacks, queues, trees, maps, tries, heaps, and graphs.
- ALGORITHMS: Analysis of time and space complexity of fundamental algorithms like binary search, DFS/BFS traversal, mergesort, quicksort, and graph routing.

ANDROID DEVELOPMENT UDACITY NANODEGREE

SEPTEMBER 2018 – JUNE 2019

- BAKINGRECIPES: Android app with ExoPlayer videos and a home screen widget, for both phones and tablets.
- XYZREADER: Espresso instrumented testing and Material Design guidelines for an RSS feed reader.
- POPULARMOVIES: Parse JSON from an API source, and SQLite databases for persistent storage.

ANDROID BASICS UDACITY NANODEGREE

JANUARY – SEPTEMBER 2018

- GROW WITH GOOGLE SCHOLARSHIP: Awarded a full scholarship to the program by achieving the top 10% in project quality, community engagement, and technical skill.
- NEWS APP: An introduction to asynchronous threads and more complex framework API.

**MECHANICAL CONSULTANT
BLACK PINE ENGINEERING LLC**

FEBRUARY 2017 – APRIL 2019

- COLLABORATIVE TEAMS: Technical lead of a virtual, multi-disciplinary engineering team that manufactured a mechanical prototype in 7 months.
- DESIGN ENGINEERING: Project management of a high-speed compression system at 10 kW and 20,000 rpm.

**SENIOR MECHANICAL ENGINEER
SOLAR TURBINES INC – TURBOMACHINERY PRODUCTS**

APRIL 2016 – JANUARY 2018

- SOFTWARE DESIGN: Enhanced numerical modeling techniques of a 16 MW gas turbine that reduced operational vibration by 0.9 mil.
- MATLAB PROGRAMMING: Created novel algorithms to sort turbine blades that reduced manufacturing time by 140 hours per week.
- MECHANICAL DYNAMICS: Decreased testing costs by 1.5 million dollars through an assembly process optimization of 4 large engine programs, received an *Employee Recognition Award*.

**MECHANICAL ENGINEER
SOLAR TURBINES INC – TURBOMACHINERY PRODUCTS**

MAY 2012 – APRIL 2016

- DATA ANALYTICS: Technical lead of a cross-functional team that developed equations for power loss using creative insights into mechanical wear.
- MECHANICAL ENGINEERING: Design, analysis, manufacture, and test of industrial magnetic bearings as proof of concept R&D.
- PROVEN EXPERTISE: Dynamic finite element analysis of rotor dampers that increased operational stability by 19%, and analysis of torsional resonance in support of new package sales.

**ASSOCIATE MECHANICAL ENGINEER
SOLAR TURBINES INC – GAS COMPRESSORS**

JULY 2010 – MAY 2012

- ANALYSIS: Investigation of o-ring depressurization rates for 7 different product lines.
- TEAMWORK: Simulations and verification testing of a natural gas facility with 50,000 acfm flow capacity.

EDUCATION

**MASTER OF SCIENCE IN MECHANICAL ENGINEERING, GPA 3.90
CALIFORNIA POLYTECHNIC STATE UNIVERSITY – SAN LUIS OBISPO**

DECEMBER 2011

- OUTSTANDING GRADUATE STUDENT AWARD: Achieved the highest GPA in the graduating class.
- SAE BAJA: Team design of a 5-speed manual transmission for an off-road vehicle.

**BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING
CALIFORNIA POLYTECHNIC STATE UNIVERSITY – SAN LUIS OBISPO**

JULY 2009

PORTFOLIOS

WEBSITE
sommerengineering.com

LINKEDIN
linkedin.com/in/apsommer

GITHUB
github.com/apsommer