

# TODD DUNCAN

formerly Todd Delaune

software engineer

## CONTACT

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Atlanta, Georgia   
United States

## EDUCATION

**M.S. COMPUTER SCIENCE**  
*Georgia Institute of Technology*  
Atlanta, Georgia

**B.S. COMPUTER ENGINEERING**  
*Auburn University*  
Auburn, Alabama

## HARD SKILLS

Java



UNIX Scripting

(bash, gnu tools, perl, php, awk, etc.)



SQL & DBMS



## SOFT SKILLS

Leadership



Critical Thinking



Collaboration



## PERSONAL STATEMENT

I am a well rounded “jack of all trades” Java developer with over 20 years of professional experience. From pyrotechnics to front end GUI development to highly efficient multithreaded server code I do it all. I excel in writing elegant and efficient back end code and optimizing existing software systems. I bring balance to my life as an acrobat, endurance athlete, outdoorsman, yoga teacher, and builder. I have expertise in team building, facilitation techniques, conflict resolution, skillful communication, and leadership.

## PROFESSIONAL EXPERIENCE

### Independent Contractor

*Atlanta, Georgia // 2007-Present*

#### ClientTracker // 2018-2019

- Developed free Android app to track time/money spent with clients and associated financial records keeping using Java and CodenameOne. App designed for broader use cases: a way of keeping track of who owes who money, whose turn it is to buy lunch, a todo list, and more.

#### PDK Watch // 2016-2018

- Created free Android and iOS app (PDK Noise Report) to support neighboring communities using Java and CodenameOne. This app allows people to file noise complaints in 3 taps instead of calling and leaving a voicemail making the process 10-15x faster for both the community and the airport (easier for airport to parse data). This has increased complaints 10 fold and improved the airports communication with the community.
- Integrated an SPL (sound pressure level meter) using Python to track high noise events of low flying aircraft. Integrated a RealTek SDR (software defined radio) tuned to listen to ADS-B data coming from local aircraft using Java to gather aircraft elevation and position. Wrote bash scripts to coordinate, parse, and graph this data for airport transparency in the community.

#### PrIDI // 2013-2014

- Authored music visualization software for children with Autism. Using MIDI inputs the software maps notes to shapes of varying color, location, and size. Since music alone was not fully engaging the visual stimulation helped increase interest & calm without over stimulation (other more intense visual effects caused more harm than good). PrIDI provided a further benefit to musicians as they can better see note & chord patterns.

#### BurnTec // 2011-2013, 2008-2010

- Developed a visual effects interface for persistence of vision displays (POV) in Java using Swing. Developed numerous graphics effect patterns for the display. The POV displays were comprised of a long vertical strip of RGB LEDs spinning around the perimeter of a cylinder at high enough rate of speed to create a holographic cylindrical display “screen” like a straw circling around a tall glass. Challenges included bandwidth allocation & data compression, synchronization, and UDP issues in congested WiFi networks.

## UNRELATED SKILLS

### **AcroYoga Instructor** 2006-Present

- Founder and head of the Atlanta AcroYoga community
- Taught, trained, performed, led retreats, facilitated community
  - Encouraged people to overcome their fears and self imposed false limiting beliefs

### **Yoga Instructor** 2005-Present

- Taught yoga, thai massage, corporate yoga, & yoga teacher training programs

### **Home Renovator**

2017-2019 & 2015-2016

Remodeled two single family home investment properties.

Skilled trades include:

Electrical work, structural engineering, carpentry, plumbing, dry walling, tiling, flooring, siding, framing, landscaping, demolition, and general craftsmanship.

Major projects include:

- Convert open carport to sealed garage
- Replace multiple load bearing walls with beams
  - In place floor & box joist replacement
- Complete rebuilds of master bed & bath suite
  - Complete kitchen rebuilds
  - Completely rewired both properties to include ground

- Developed pyrotechnic control software and real time audio stream algorithms for beat detection to drive flame effects to music using Swing. One effect was a fire driven graphic equalizer. A major hurdle is the physical delay in releasing and igniting propane. The software had to predict likely beats on multiple frequencies to synchronize fire with sound.

### **Yoga Software Manager // 2006-2007**

- Authored and maintained a feature rich application for managing a yoga studio. This 100% Java software has an embedded database, fully transparent configurable Swing components (before this existed in the JDK), student, teacher, & class tracking, scheduling, financial data tracking, report generation, and more. Challenges included creating a transparent, automatic, on and offline database backup system; acting as both project manager, sales manager, and developer; bridging the language gap between yoga teacher and software engineer. Satisfied customer needs without overburdening them with technical know-how.

### **SecureWorks**

#### *Senior Software Engineer // Atlanta, Georgia // 2005-2007*

- Created a company wide re-architecture push to better handle security events in a streamlined, scalable pipe.
- Developed a security event pattern detector/filter and interface in Java to efficiently and in real time modify and process rules based detection.
- Optimized existing software deployment systems; the 1+ hour long security rule set deployment now runs in 10-15 minutes saving the company money and potential downtime.

### **Z-Tel/Trinsic Communications**

#### *Software Engineer // Atlanta, Georgia // 1999-2005*

- Developed and maintained software at all enterprise levels from the backend databases, through the middleware, into the telephony controls, and lastly to the user on the phone. Technologies included Oracle, Java, Novell, VXML, JSP, in-house languages, Dialogic API, XSLT, Weblogic J2EE, Apache, bash/perl scripting and Excel switches.
- Major performance enhancing redesign/rewrite of existing Java/C++ telephony code. Interfaced with Dialogic DLL's using JNI and created a highly multithreaded resource sharing mechanism nearly quadrupling existing performance and call load capacity saving the company hundreds of thousands in server costs.
- Developed multiple full stack special-purpose Java programs for system monitoring, call tracing, and maintenance.
- Wrote a real time no compile Java command line interpreter scripting language. Effectively a simplified version of jshell 15 years before it existed. This tool became a standard for the company for testing middleware and other calls.
- Maintained and configured development, QA, and production environments.
- Developed and maintained several UNIX scripts (statistical gathering, database/file system comparison/sync, etc.) becoming standard company tools
- Responsible for 24x7 on-call duties