

Billy Charlton
sfbilly@gmail.com

Hi there YNAB! As luck would have it, I ran across your mobile software dev job posting on July 1st, exactly one day after the deadline. So I know this will fall on deaf ears, but if you decide you don't like any of your candidates who actually made the deadline, please read on.

Why I want this job

I'm a rabid YNAB fan ever since I found you guys in 2016. I saved thousands thanks to you and I'm well on my way to financial independence because of YNAB, period. I didn't know I was looking for a new job until I saw your posting today! I would love to give back and contribute to something that has helped so many people like myself.

Software Experience

I've been doing Android dev since 2011, when I wrote the most-popular and most-used "When's my bus coming?" Android app for San Francisco, with more than 100,000 users. Quicky Transit hasn't been updated in a couple years so it has long since past its useful life, but I still get fan mail from users who love its elegant user-centric design. I have two other successful Android apps that are for private clients (Sidewalk Labs and the City of San Francisco's Municipal Transportation Agency) which I can't show you but I can describe if you are interested.

More recently I've been doing lots of Javascript data-visualization portals. Check out <https://tncstoday.sfcta.org> - a portal I built for San Francisco that visualizes Uber/Lyft pickups across the city (and what a juicy story this project was! more on that if you want!) and several other similar projects for SF.

My current position is building a web-based platform at the Technical University of Berlin (Germany) for visualization of urban simulation data. We build models of traffic and transit and use them to ask what-if questions like, "What if driverless cars really take over our streets?" and "What if transit were free?" This project is a mix of Javascript front-end and Java server back-end processes.

Note, I have also managed development teams; I was the "Director of Data" leading a team of 20 at my previous position (at a regional planning agency in Seattle), and consider myself a strong leader, team player, and chief motivator when I need to be! References available.

From my experiences, you can see that I'm passionate about making the world better for people. So far I've done lots of urban planning and transportation industry stuff, but anything that helps people -- whether it be building a nest-egg or shaving time off their commute, I'm all for it!

To answer your specific questions:

- My two strongest programming languages are Java and JavaScript/Node. I've been writing Java without break since 1999 (gasp). It's been fun seeing it evolve. And I finally taught myself JavaScript two years ago for the web front-end visualization work described above. I actually don't hate "modern" JavaScript. TypeScript is better, though.

- I can adapt to new languages quickly, in fact that's part of the fun of being a developer! I know Java, Javascript, TypeScript, and Python very deeply, with two decades of progressive experience building complex applications. I have dabbled in Kotlin, R, Elixir, and C++. Some scientific code we wrote was even in FORTRAN. Physicists still love FORTRAN because it's really fast.

- A proud debugging moment? For Quicky Transit I finally solved an algorithmic problem which was blocking the "One More Beer" feature. Quicky was the first transit app I know of to allow you to set an alarm, i.e. "Let me know when my bus/train is five minutes away" so you could grab your keys and shoes... or finish your beer at happy hour. The snooze button was labeled "One More Beer" and would ignore the next arrival, and warn you when the *subsequent* arrival was five minutes away. Users went crazy for this feature, lol. Anyway, the NextBus API would mix up the order of arrivals often, and I had to design my own way to track vehicles based on their run-number instead of assuming the JSON order from the API was time-based. It was such a small thing... with such great effect.

- A good interview question: my favorite question is the "ransom note" question, where you ask the candidate to walk you through how they'd design a method to cut out letters from a magazine article to assemble the message of a ransom note. There are lots of ways to do it correctly, and seeing them talk through making an initial solution more efficient can be really enlightening. And no whiteboard required. Just thinking and talking.

- I'm curious as to why "excellent debugging skills" is a bullet point for you. is this a pain point for your code base? Yes I am excellent at debugging. How do you feel about testing?

- Programming exercise: <https://www.interviewzen.com/interview/4J9B3Kx>

- I am not a bot, spammer, recruiter, or agency.

- Note also that in addition to being a human I also check off two diversity boxes for your team -- I'm in my 40s and I'm gayer than a three dollar bill.

Note I currently live in Berlin, Germany, but I am a U.S. citizen with a work visa which allows me to stay here and work in Germany.

I hope you read this far and realize I am who you are looking for. You are who I'm looking for!!!
Pick me! Pick me!

All my best,
Billy Charlton sfbilly@gmail.com
-- on Github at <https://github.com/billic>
-- on Twitter at @billyinberlin