



Matt Bao

B.S. in Engineering Physics (2014)

M.S. in Electrical and Computer Engineering, UC Santa Barbara (2016)

Uber Technologies, San Francisco, CA

Describe your overall duties/responsibilities as a Software Engineer II:

I specialize in Android development, so I work on anything related to any of the Android apps from Uber (Uber, UberEats, Uber for Driver, etc.). I've been on two teams since I joined Uber. The first team was Driver Loyalty, my job was basically building everything related to the Uber Pro feature (a rewards program for drivers) in the Driver app; it involved a lot of working with backend engineers and UI/UX designers to make sure all the data is displayed correctly and beautifully. My current team is called Marketplace Experimentation, and we're responsible for Uber's feature-flagging/experimentation framework. My job is to build the mobile SDK of this framework to be used by all other mobile developers at Uber for their features in the apps they're working on. This involves much less UI related work, and a lot more work related to building the networking layer, persistence layer, etc. at a foundational level for Uber apps.

Explain the skills/abilities that are required for being successful in your role:

Having a solid understanding of all the basic data structures and software design principles is important. When building applications at the scale that Uber has, it's critical to write your code in a very scalable structure. You need to be able to write clean, efficient, and bug-free code

very fast. Additionally you have to have great communication skills. As a software engineer, you need to communicate and explain very intricate and abstract concepts daily to your teammates and other stakeholders, who may not all have a computer science background. So, it's very important that you can get your ideas across clearly to any audience.

What advice would you give to students who are considering majoring in Engineering Physics?

Engineer Physics is a great composite major and it gives you exposure to all kinds of basic ideas and principles that are applicable to all STEM fields. You can very easily go into electrical engineering, computer science, physics, or any other engineering field with this foundation. If you want to become a software engineer, always be working on that skill on the side. Even if you don't take any computer science classes, you should read data structure/algorithm textbooks and practice on your own as much as possible. Also, do put efforts into any group projects from any of your classes -- the subjects of the projects themselves aren't the stars, you are really honing your ability to work effectively as a team member in any team, with people of all communication styles, skill levels, and commitment levels. You can't always pick your teammates/colleagues, but you can always control the outcome by adjusting your work style.

