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OPEN-SOURCE E-BIKE USES SMARTPHONE AS ON-BOARD COMPUTER

 MOBILITY & TRANSPORT

Urban mobility startup Velo is hoping to make an open-source computer-aided e-bike available to road users in the form of the Velo-1.

Cyclists who use their two-wheeler for sports or tricks have already seen steps to incorporate technology into their rides with the [Audi e-bike Wörthersee](#), and now urban mobility startup Velo is hoping to make an open source computer-aided e-bike available to everyone in the form of the [Velo-1](#). As well as being powered electronically, the bike has an onboard Arduino controlled through the user's smartphone, which is placed in a secure holder at the handlebars and connects to the bike via Bluetooth. The computer allows for automatic gear shifting – which in fitness mode can simulate inclines and descents on flat roads – as well as enabling riders to see how far they will be able to travel on the available battery. The app also recommends safe cycling routes, detects if the rider is heading too fast towards an object in front and lets users share their ride data with others through social networks. Both the Arduino hardware and Android app will be open source to allow customers to develop their own uses for the e-bike. Velo hopes that local authorities could use the device as an easy way to create a bike-sharing platform, with electronic locking and unlocking, accurate fee-charging and bike locating functionality. The following video explains the features the bike will have:

Just as with the Audi project, the Velo-1 is currently in the prototype stage but [reports](#) suggest the company is planning to launch a Kickstarter campaign in the next few months. One to get in on early?

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