**Cruise**

**Recommendation:** The market is huge, and they are one of the leaders in self-driving and ride-sharing, with strong competition in the latter category only from Waymo. I cannot give a yes or no because I do not have the valuation data for the company. The TAM is so big, that if the valuation is a reasonable amount, I recommend investing because I think this company has a lot of potential to grow and continue being one of the leaders in the market.

**Opportunity:** Acquire a forward contract for $112,347 at 90% FMV under option from JP Posma, Cruise’s Staff Software Engineer / Tech Lead from May 2018 to August 2020. He wants to buy a house and is excited to turn his restricted stock into money..

Purchase price per share of $3.37, a 10% discount to the fair market value per share of $3.75 (per Pitchbook).

Cruise’s latest round of financing was a $1.08B PE Growth/Expansion round closed in August 2020 at an unknown pre-money and post-money valuation. Undisclosed investors were involved in the round.

Previous Rounds:

| **Deal Type** | **Date** | **Amount** | **Pre-Val** | **Post-Val** |
| --- | --- | --- | --- | --- |
| Secondary Transaction - Private | January 2020 | Unknown | Unknown | Unknown |
| PE Growth/Expansion | July 2019 | $3.35B | Unknown | Unknown |
| PE Growth/Expansion | May 2019 | $1.15B | Unknown | $19B\* |
| Corporate | October 2018 | $2.75B | Unknown | $48.25B\* |
| Merger/Acquisition | May 2016 | $581M\* | Unknown | $581M\* |
| Early Stage VC | December 2015 | $2M | Unknown | Unknown |
| Series A | September 2015 | $16.89M | $67.58M | $84.47M |
| Seed Round | August 2014 | Unknown | Unknown | Unknown |
| Accelerator/Incubator | March 2014 | $100k | Unknown | $1.39M |

\* Estimated

**Background:** Founded in 2013 in San Francisco, California. Raised $8.33B to date. 2,206 employees.

**Summary:** Cruise is an unattended vehicle company majority-owned by GM. GM realized that they needed a system capable of navigating cities, so they acquired a stake in Cruise. The technology the company produces will be used for their cabs and could be used for other vehicles. It is based on LIDAR.

**Pain Point:** Current self driving systems require human supervision, hands on the wheel and pedals in case anything happens. Unattended self driving opens a whole new set of possibilities, like trucks, taxis, and delivery vehicles without drivers.

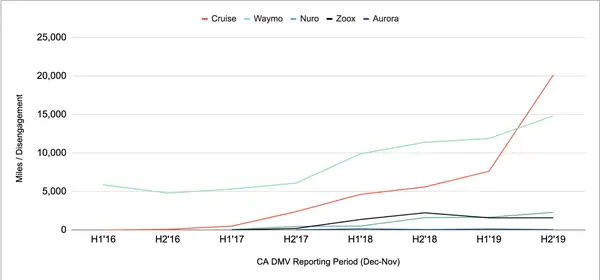
**Product**: Two parts. First is the self driving technology itself. They have developed hardware and algorithms that allow a car to drive through a busy city understanding that other vehicles most of the time will not respect driving laws. The second part is autonomous taxis. Based on this technology, they have built a vehicle capable of picking a passenger up and dropping them off at another location without any human intervention.

**Market**: According to “Verified Market Research” the Mobility as a Service Market was valued at USD 49.67 Billion in 2019 and is projected to reach USD 271.66 Billion by 2027, growing at a CAGR of 23.7% from 2020 to 2027.

According to Cruise’s valuations, ride-hailing sits at $5T, freight at $2T, and data insights and in-vehicle experiences sit at $500B each.

**Competition**:

1. Lidar-based:
   1. Waymo
      1. Much more focused on the “AI drivers” than in the ride-sharing services
      2. Waymo One is a ride-sharing service
      3. Biggest competitor, with approximately the same size, same yearly investment and
      4. Slower growth of miles / disengagement (primary metric used for measuring the robustness of an unattended driving system)
   2. ArgoAI
      1. Backed by VW and Ford
      2. Does not seek to create a car or operate a service but create a generic self-driving system that can be applied to any car
   3. Aurora
      1. Produce sensors and self-driving systems
      2. Are creating a platform to take advantage of the self-driving capabilities will have in the future, including vehicle platforms, logistics services, mobility services and fleet management services
   4. Uber
      1. Sold its self-driving division to Aurora, which according to the founder helped them “accelerate” its mission to make self-driving cars a reality
   5. Nuro
      1. Focused on item deliver using its purpose-built, egg-shaped R2 autonomous vehicles
2. Camera-based:
   1. Tesla
      1. Their systems require constant driver attention as they are not rated to unattended driving
   2. Mobileye
      1. Plans to add lidar and radar
      2. The offer a suite of products, both for personal vehicles and for public transports



**Differentiation/Defensibility**: Nothing appears to radically differentiate them from the competition, but through their quick ramp up they have proven they are capable of performing well

**Team**: 2,206 full-time employees in 2020. The leadership team consists of around 13 people. These three are the most important:

1. Kyle Vogt (Co-founder, President & CTO)
   1. ex-Co-Founder Twitch, Justin.tv, Socialcam, Panasonic Boston Laboratory, iRobot. Massachusetts Institute of Technology 2008
2. Dan Ammann (CEO)
   1. ex-President General Motors, MD Morgan Stanley, Credit Suisse. The University of Waikato 1993
3. Daniel Kan (Co-founder & CPO)
   1. ex-Co-Founder EXEC, UserVoice, Justin.tv. Claremont McKenna College BA

**Open positions for hiring**:Senior Software Engineer (Machine Learning Platform), Senior Hardware Engineer (Validation), Senior Site Reliability Engineer, Senior Software Engineer (Embedded Linux), Senior Vulnerability and Risk Engineer, Senior Structural CAE Engineer, Senior Power Engineer. [Link to full list](https://www.linkedin.com/jobs/search/?f_C=6577635&geoId=92000000)

**Traction**: They do not have a public product yet, but they are already advertising their ride-hailing platform in San Francisco. Big companies like GM and Honda have invested and have stated that they will continue to invest more money, indicating that they are content with the work being done at Cruise. Earlier this year, they autonomous cab was presented on stage.

**Business model**: Their business model has not been revealed yet, but I expect them to offer ride hailing as a service to the public through their robo-taxis and also to license their driving technology to other manufacturers like Honda and GM.

**Go-to-market**: They want to start by testing the service in one big city and then expanding at scale. They are doing an old-school ad campaign in San Francisco to make the public aware of the service and get the launch right. According to their plan, after this they would expand city by city, starting out with the biggest ones.

**Press**

1. Cruise is not testing fully driverless card in San Francisco ([The Verge](https://www.theverge.com/2020/12/9/22165597/cruise-driverless-test-san-francisco-self-driving-level-4))
2. Cruise CEO: Self-driving car market is ‘literally trillions of dollars’ ([Fortune](https://fortune.com/2020/12/01/gm-cruise-ceo-self-driving-car-market-trillions-of-dollars/))
3. Supervisors decry lack of local oversight over unmanned vehicles ([San Francisco Examiner](https://www.sfexaminer.com/news/supervisors-decry-lack-of-local-oversight-over-unmanned-vehicles/))
4. Walmart to test deliveries by self-driving car with General Motors’ Cruise ([CNBC](https://www.cnbc.com/2020/11/10/walmart-self-driving-car-deliveries-gm-cruise.html))
5. Tesla Autopilot loses to GM Super Cruise due to lack of driver monitoring in industry-wide test ([Electrek.co](https://electrek.co/2020/10/28/tesla-autopilot-loses-gm-supercruise-due-to-lack-of-driver-monitoring-industry-wide-test/))
6. Cruise, GM to see U.S. okay for self-driving vehicle without pedal, steering wheel ([Reuters](https://www.reuters.com/article/us-autonomous-cruise-nhtsa/cruise-gm-to-seek-u-s-okay-for-self-driving-vehicle-without-pedal-steering-wheel-idUSKBN2762SP))
7. Tesla Begins “Full Self Driving” Public Beta As Waymo And Cruise Go Unattended ([Hackaday](https://hackaday.com/2020/10/23/tesla-begins-full-self-driving-public-beta-as-waymo-and-cruise-go-unattended/))