

Autonomous car data track schedule

| Class | Topics to be covered |
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| Class 1 | Design thinking |
| Class 2 | Autonomous car introduction |
| Class 3 | Anaconda tool Installation |
| Class 4 | How do Autonomous cars work? |
| Class 5 | Computer vision |
| Class 6 | Computer vision |
| Class 7 | Deep learning - NN |
| Class 8 | Deep learning - CNN |
| Class 9 | CNN Architecture |
| Class 10 | Object detection |
| Class 11 | Object detection |
| Class 12 | Deep learning concepts in Autonomous car |
| Class 13 | Autonomous car Assembling part |
| Class 14 | Machine learning in Autonomous Car |
| Class 15 | Lane detection |
| Class 16 | Project 1 - Lane Finding |
| Class 17 | Project 2 - Advanced Lane Finding |
| Class 18 | Building a Road Sign Classifier in Keras |
| Class 19 | Building a Road Sign Classifier in Keras |
| Class 20 | Project 3 - Traffic Sign Classifier |
| Class 21 | Vehicle Detection |
| Class 22 | Project 4 - Vehicle Detection |
| Class 23 | Behavioral Cloning |
| Class 24 | Project 5 - Behavioral Cloning |
| Class 25 | Hough Transform |
| Class 26 | Hough Transform |

Autonomous car Product track schedule

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| Class 27 | State Estimation - Linear and Nonlinear Kalman Filters |
| Class 28 | State Estimation - Linear and Nonlinear Kalman Filters |
| Class 29 | State Estimation - Linear and Nonlinear Kalman Filters |
| Class 30 | State Estimation - Linear and Nonlinear Kalman Filters |
| Class 31 | State Estimation - Linear and Nonlinear Kalman Filters |
| Class 32 | State Estimation - Linear and Nonlinear Kalman Filters |
| Class 33 | GNSS/INS Sensing for Pose Estimation |
| Class 34 | GNSS/INS Sensing for Pose Estimation |
| Class 35 | LIDAR Sensing |
| Class 36 | LIDAR Sensing |
| Class 37 | LIDAR Sensing |
| Class 38 | An Autonomous Vehicle State Estimator |
| Class 39 | An Autonomous Vehicle State Estimator |
| Class 40 | Sensors |
| Class 41 | Sensors |
| Class 42 | Least Squares |
| Class 43 | Least Squares |
| Class 44 | Least Squares |
| Class 45 | Project 6- Extended kalman filter |
| Class 46 | Motion planning - Map :Mapping for planning |
| Class 47 | Motion planning - Map- Populating occupancy grids from LIDAR scan data |
| Class 48 | Motion planning - Mission:Dijkstra's Shortest Path Search |
| Class 49 | Motion planning - Mission: Dijkstra's Shortest Path Search |
| Class 50 | Motion planning - Mission: A* Shortest Path Search |
| Class 51 | Motion planning - Dynamic object: Motion Prediction |
| Class 52 | Motion planning - Dynamic object: Map-Aware motion prediction |
| Class 51 | Motion planning - Dynamic object: Time to Collision |
| Class 52 | Sensor fusion - Loss of One or More Sensors |
| Class 53 | Project 7- Kidnapped vehicle |

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| Class 54 | Control - Introduction |
| Class 55 | Control -Autonomous vehicle introduction |
| Class 56 | Control -Compute graph |
| Class 57 | Control -Exercise |
| Class 58 | Control - Message passing |
| Class 59 | Control - ROS Service |
| Class 60 | Control - ROS Service |
| Class 61 | Control - Turlesim |
| Class 62 | Control - Turlesim |
| Class 63 | Control - Node and topics |
| Class 64 | Control - AI for robotics |
| Class 65 | Control - Components inputs wrap up |
| Class 66 | Control - Perception subsystem |
| Class 67 | Control - Planning subsystem |
| Class 68 | Control - Control subsystem |
| Class 69 | Project 9 - PID control |
| Class 70 | Project 10 - Autonomous vehicle |