

# ABOUT

Volley Automation leverages the power of robotics & advanced computing to offer fully automated parking solutions that dramatically densify new or existing parking structures enabling developers to reclaim valuable real estate and increase ROI by adding additional commercial floors or more residential space.

Our fully automated parking solutions maximize garage performance, reduce the overall operating costs and dramatically improve the energy efficiency. Our patent pending reliable robotics platform allows developers to leverage parking assets for adding new sources of revenue such as personal storage pods, edge computing delivery & receiving units, EV charging, integrated car services, and eventually autonomous depots for self driving cars. Our solutions maximize the ROI for parking assets by fully integrating new and existing use cases giving developers much needed optionality in building structures of lasting value.

Key  
e  
Automation  
ROI

Autonomous robotic parking maximizing urban density and return on investment with a team from Tesla, Uber and Google.

Volley Automation | Fremont, CA | [info@volleyautomation.com](mailto:info@volleyautomation.com)

Volley reduces the spatial requirements, environmental impact and operational costs of parking structures thereby unlocking valuable opportunities for real-estate developers.



# VOLLEY'S PRODUCTS

## Automated Parking

Volley's Automated Parking system significantly increases the density of parking and allows modular storage of bikes, scooters or motorcycles. Our designs are optimized using proprietary algorithms and simulation, making spaces 2-3x more efficient.

## Automated Personal Storage

Volley Automated storage system increases density of storage assets and allows owners to dynamically configure storage pods of various sizes creating significantly more demand elasticity for their business. Volley's storage systems reduce overall construction costs, operating expenses and increase ROI for storage owners.



Our systems seamlessly integrate into **retrofits** of existing structures as well as **new construction**, returning valuable space to property owners.

# VOLLEY'S ADVANTAGE

## Increased Spatial Efficiency

Volley's suite of design products use genetic algorithms to design optimal garage layouts that can park 50-200% more cars in the same amount of space. Our system allows architects, designers and stakeholders to interact with various layouts to maximize the spatial utilization.

## Increased ROI

Volley's system offer developers a number of add-on modules to maximize leverage. Volley's modules allow for mixed use cases such as parking cars, personal storage, storing bike racks, scooters, EV electric charging stations, storage or mail room lockers and eventually autonomous depots for self driving cars. The modular platform maximizes the ROI for developer on a on-going basis.

## Retrofit Existing Asset

Our ability to work within the constraints of existing architecture with minimal structural changes saves time and money. Our system is designed to leverage commodity hardware in combination with proprietary technology to automate traditional garages or resurrect decommissioned automation projects.

## Sustainable & Clean

Volley garages do more with less, dramatically reducing the area allocated to parking. Traditional garages have high concentrations of toxic automobile-related air pollutants while in Volley garages, combustion engines are turned off throughout the parking process. Volley's garages reduce power requirements thereby adding more LEED points to the overall structure.

## Advanced Tech

Using robotic technology, the mobility of each garage is increased exponentially, allowing every parking space to be simultaneously accessed with our versatile AGVs. Each insert and retrieval is optimized in our cloud based routing system. Programmable controls, advanced diagnostics and predictive analytics create a system that can accommodate the range of demand expected throughout the day and empower garage owners to evaluate and respond to trends and demands.

## Failsafe Designs

Volley systems are built with multiple reliable redundancies improving availability and uptime. Critical functions for AGV movement work even if the control software breaks or the power goes out. We employ multi-version programming and dual modular redundancy engineering. Volley AGVs are controlled through the cloud, but also come with a mobile-based manual control system to guarantee garages can be emptied.

# VOLLEY'S TEAM

We have built a diverse team of 10+ engineers from Uber, Google, Tesla, Rethink Robotics, iRobot and GE Aviation. Every engineer has an advanced degree in math, computer science or robotics from top programs like MIT, Brown, Berkeley, Georgia Tech, and University of Waterloo. 30% of the team has PHD in robotics, math or computer science.

The team together has many decades of building highly reliable production systems which operate at a massive scale. Engineers on our team are highly versatile. We have folks who are just as comfortable welding steel (we built our robots ourselves in our tiny warehouse) as they are with complex software systems.

AG Gangadhar is the founder & CEO of Volley. AG brings two decades of executive leadership at major tech companies.

His experience includes:

- Chief Technology Officer for self driving car division, General Motors
- Head of Core Engineering, Uber
- Head of Cloud Engineering, Google



**AG Gangadhar**

CEO & Founder  
CTO for self-driving car division, GM  
Head of Core Engineering, Uber  
Head of Cloud & Core Infra, Google



**Chris Smith**

Software & Systems Engineer  
7+ years experience at Tesla



**Dennis Siedlak**

Software Engineer  
PhD in System Scheduling  
Georgia Institute of Technology



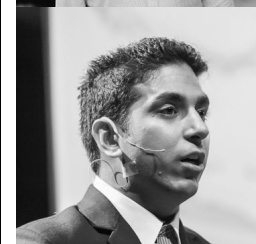
**Marc Artigas**

Software & Systems Engineer  
10+ years in Industry at Tesla, Boehringer Ingelheim and ESD



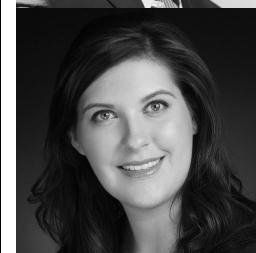
**Andrew Schmidt**

Head of Marketing  
Previously PUMA, Soofa  
and Superpedestrian  
Last two were MIT VC funded



**Ronak Massand**

Head of Growth & Partnerships  
Former CEO & Co-founder  
of Parkloco  
Master of Science, Brown University



**Laura Inozemtseva**

Software Engineer  
PhD in Computer Science,  
University of Waterloo



**John Jakomin**

Mechanical Engineer  
7 years Aerospace Mechanical  
Design Engineer, GE Aviation  
2+ patents pending



**Albert Wu**

Software Engineer  
5+ years experience of software engineering at Twitter & Uber  
MIT Battlecode Winner



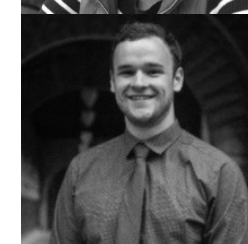
**Umberto Scarfogliero**

Robotics Engineer  
Lead Principal Engineer, Auris Health & Rethink Robotics  
PhD, Robotics



**Becky Soltanian**

Computer Vision Engineer  
Lead Engineer, DAQRI, BYTON  
Algorithm Engineer, Velodyne  
PhD EECS



**Connor Anderson**

Robotics Engineer  
Engineer at Fetch Robotics  
Mechanical Engineering, Stanford



**Syed Rizvi**

Engineering Technician  
Tesla



**Kevin Weekly**

Controls Engineer  
Principal Software Engineer, iRobot, Fitbit  
PhD in Electrical & Electronics,  
UC Berkeley