

## Education

- William Marsh Rice University** Houston, TX, USA
  - Ph.D. student in Computer Science, Advisor: Dr Lydia Kavraki* Aug. 2017 - Present
    - 8 Semesters Completed, GPA: **3.65/4**
    - Research Areas: AI, Robotics, Motion Planning, Representation Learning
- Aristotle University of Thessaloniki** Thessaloniki, Greece
  - Diploma in Electrical and Computer Engineering* Sep.2011- Apr.2017
    - Graduated with 'Excellent', **8.86/10** cumulative average (Top 2%)
    - Thesis: Structural Analysis of Handwritten Equations Using Probabilistic Context-Free Grammars

## Research Experience

- Kavraki Lab, <http://kavrakilab.org/>** Rice University, Houston
  - Graduate Student* Aug. 2017 - Present
    - Research in Robotic Learning. [1–3,5]
    - Software development for education and research purposes.
- TracLabs Robotics Group, <https://tracilabs.com/>** TracLabs, Houston
  - Research Intern* Jul. 2019 - Aug. 2019
    - Integrated a motion planning framework (OMPL) with existing infrastructure (CRAFTSMAN)
    - Investigated experience-based planning in an industrial manipulation problem.
- Pandora Robotics Group, <http://pandora.ee.auth.gr/>** Aristotle University, Thessaloniki
  - Software Engineer and Tester* Sep. 2013 - Feb. 2015
    - Mapped robots georeferenced track and surrounding environment in a 2D geotiff (Qt, C++)
    - Developed an online diagnostic tester for the stat

## Fellowships and Awards

- NSF Graduate Research Fellowship** Rice University, Houston
  - Awarded to outstanding graduate students in the US in STEM* May. 2019
- ICRA 2019 Travel Grant** Rice University, Houston
  - Awarded to ICRA2019 attendees in a competitive basis* Mar. 2019
- Hellenic Professional Society of Texas Scholarship** Rice University, Houston
  - Awarded to students with Greek Origins for Academic Excellence* Jan. 2018

## Publications

- [1] C. Chamzas, A. Shrivastava, L. E. Kavraki “Using Local Experiences for Global Motion Planning,” *IEEE International Conference on Robotics and Automation (ICRA)*, 2019.
- [2] C. Chamzas, Z. Kingston, A. Shrivastava, L. E. Kavraki “Learning sampling distributions using local 3D workspace decompositions for motion planning in high dimensions” *IEEE International Conference on Robotics and Automation (ICRA)*, 2021. **Top-4 finalist for best paper in Cognitive Robotics**
- [3] E. Pairet, C. Chamzas, Y. Petillot, L. E. Kavraki “Path Planning for Manipulation using Experience-driven Random Trees” *IEEE Robotics and Automation Letters (RAL)*, 2021.
- [4] D. Chamzas, C. Chamzas, K. Moustakas “cMinMax: A Fast Algorithm to Find the Corners in an N-dimensional Convex Polytope” *International Conference on Computer Graphics Theory and Applications (GRAPP)*, 2021.
- [5] C. Chamzas\*, M. Lippi\* , M. C. Welle\*, A.Varava, A.Marino, D. Kragic, L.E.Kavraki “Structuring Latent Representation with Minimal Supervision for Robotic Tasks ” *3rd Robot Learning Workshop in NeurIPS*, 2020.

## Teaching Experience

- **Artificial Intelligence (COMP 440/557)** Rice University, Houston  
*Teaching Assistant* Aug. 2019 - Dec. 2019
- **Probabilistic Algorithms and Data Structures (COMP 480/580)** Rice University, Houston  
*Teaching Assistant* Jan. 2019 - . 2018
- **Algorithmic Robotics (COMP 450/550)** Rice University, Houston  
*Teaching Assistant* Aug. 2018 - Dec. 2018
- **Rice DataScience Bootcamp** Rice University, Houston  
*Teaching Assistant* Aug. 2018
- **Statistical Machine Learning (COMP 440/540)** Rice University, Houston  
*Teaching Assistant* Jan. 2018 - May. 2018

## Open Source Software

- The Open Motion Planning Library <http://ompl.kavrakilab.org/>
- MoveIt Robot Motion Planning Software <https://moveit.ros.org/>
- Robowflex Library <https://github.com/KavrakiLab/robowflex>
- Pyre Library <https://github.com/KavrakiLab/pyre>

## Competitions

- **IEEEExtreme Programming Competition 9.0,10.0** Thessaloniki, Greece  
*ranked 132/2.447, 126/2.113,* Oct. 2015, Oct. 2016
  - In a 24-hour time span had to solve a plethora of programming- algorithmic problems
- **CellLock,a cell anti-theft application** Thessaloniki,Greece  
*Team leader,* March 2016
  - During a 2-days workshop developed a theft-protection device for cellphones
- **AI block battle competition** Thessaloniki, Greece  
*Ranked 42 /220 in finals.* April 2016
  - Developed a bot playing a 2 player variation of Tetris,

## Languages

**Greek:** Mother Tongue

**English:** Level: C2(Excellent)

**German:** Level: B2(Good)

## Other Skills/Interests

**Service:** Officer of the Computer-Science Graduate Student Association (CS-GSA).

**Chess Player :** 2 times local champion in my hometown

**Running:** Finished 3 half-Marathons and 1 Marathon

**Sailing:** Acquired Sailing diploma in 2012, I have been sailing the Aegean Sea since 12 years old

**Boy Scout:** Was active member of the Scout Community for more than 10 years

**Leadership:** Founded an independent student movement inside the university and won the 2014 student Board elections with 40% of the votes.The goal was to help organize the students and participate in the decision making of our university in student related matters.