SIDDARTHA DEVIC

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EDUCATION

The University of Texas at Dallas *August 2017 - Present*
B.S. Mathematics, Computer Science (Double Major) 3.96/4.0
CS^2 Honors Program (35 students per grade), Collegium V Interdisciplinary Honors Program

TECHNICAL SKILLS

Machine Learning Python, Tensorflow, OpenCV
Programming & Software Java, C++, Linux, C#, C, vim, git, LaTeX, Unity3D, QT, MIPS

PUBLICATIONS

[Submitted] DeepPR: Incremental Recovery for Interdependent VNFs with Deep Reinforcement Learning. Genya Ishigaki, **Siddartha Devic**, Riti Gour, Jason P. Jue.

WORK & RESEARCH EXPERIENCE

Johns Hopkins Applied Physics Labs *Summer 2019*
Research Intern

AI and machine learning research with the Machine Perception group. Secret Clearance (2029).

Markov Lab *October 2017 - Present*
Student Researcher

Convex optimization and neural networks in the field of machine learning. Convex function fitting with applications in reinforcement learning. Investigations mentored by Prof. Nicholas Ruozzi.

Advanced Network Research Lab *April 2018 - Present*
Student Researcher

Developing Resilient Distributed Neural Networks using novel training techniques. Agent-based recovery for network graphs using reinforcement learning. Mentored by Prof. Jason Jue.

Future Immersive Virtual Environments Lab *Summer 2017*
Student Researcher

Novel method for physical object selection and representation in virtual reality. Prototyped in Unity3D for the HTC VIVE virtual reality headset. Part of Clark summer research program for pre-freshman.

POSTERS & TALKS

Failure-Resilient Distributed Deep Learning Inference *(Poster, Future Networks Summit 2019)*

Convex Functions for Reinforcement Learning *(Poster, Undergraduate Research Contest, 2019)*

Robust Optimization with Applications in Networking *(Talk, UTD Graduate Seminar, 2019)*

A Reinforcement Learning based Approach to Networking *(Talk, UTD Graduate Seminar, 2019)*

Improving Generalization in Neural Networks Through Margin Maximization *(Poster, UTD, 2018)*

Digitally Representing Physical Objects for Collision Avoidance in VR *(Poster, Clark Program, 2017)*

ACADEMIC ACHIEVEMENTS

Undergraduate Research Scholar Award	*2018-2019 (Sophomore Year)*
Intel Innovate FPGA Semi-finalist. Top 20 team in the Americas region.	*2018*
School of Engineering Dean's List (Top 10%)	*3/4 Semesters*
UTD Academic Excellence Scholarship (Honors level, full tuition + stipend)	*2017 - Present*
Clark Research Program (Participant & Mentor)	*Summers 2017 & 2018*

STUDENT ACTIVITIES

ACM UTD Chapter Vice-President Lead largest CS organization at UTD (1000+ Members). Coordinate student-based semester long technical projects, mentorship program for new students, community outreach, funding for student startups, and industry talks. 8-10 hours/week.

Empower Through Code Organize and attend weekly STEM workshops for at-risk middle school girls in low income areas. Expose them to engineering and develop critical thinking. 2-3 hours/week.

RELEVANT COURSES

(Graduate) Algorithms, Data Structures, Machine Learning, Operating Systems, Computer Architecture, Differential Equations, Differential Geometry, Abstract Algebra I, Real Analysis I