

Vennila Pugazhenth

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EDUCATION	Bachelor of Science in Computer Science The Pennsylvania State University, State College, PA Dean's List: 2017-Present Anticipated Graduation: May 2021 Relevant Courses <ul style="list-style-type: none">• Artificial Intelligence• Object-Oriented Programming with Web-Based Applications• Data Structures and Algorithms• Systems Programming• Computer Organization and Design	GPA: 3.87/4.00
SKILLS	Programming Languages: C, C++, Java, Python, SQL, Verilog, Rust, HTML, CSS, R Software: Linux command line, MATLAB, Xilinx Vivado, Android Studio	
PROJECTS	GitHub: https://github.com/VennilaPugazhenth <ul style="list-style-type: none">• A website that sends text message to user regarding driving conditions.• A file system interface on top of a virtual device with a LRU cache that supports network communication with a server.• A Hidden Markov Model (HMM) for Part-Of-Speech (POS) tagging.• A sudoku solver implemented using AC-3 constraint satisfaction algorithm.• Implemented a five-stage pipelined CPU in Verilog.	
RESEARCH EXPERIENCE	Equity REU Undergraduate Research Assistant The Pennsylvania State University, University Park, PA Aug 2019-Present <ul style="list-style-type: none">• Developing an unsupervised Spiking Neural Network (SNN) using Spike-Timing-Dependent Plasticity.• Enhancing the data throughput and accuracy of SNN in the MNIST dataset through mini-batch processing.• Utilizing Google Colab to simulate the SNN in GPU and TPU. Multi-Campus REU Undergraduate Research Assistant The Pennsylvania State University, University Park, PA May-Aug 2019 <ul style="list-style-type: none">• Conducted material research in improving self-healing property of spinel ceramics utilizing recycled lamp glass.• Investigated various materials to incorporate in spinel ceramic for improving its self-healing property.	
LEADERSHIP EXPERIENCE	Women in Engineering Program Study Group Facilitator The Pennsylvania State University, University Park, PA Jan 2020-Present <ul style="list-style-type: none">• Serving as a mentor for freshmen and sophomore engineering women• Assisting study group members to understand concepts in a Physics course.	
WORK EXPERIENCE	Peer Tutor The Pennsylvania State University, Harrisburg, PA Aug-Dec 2018 <ul style="list-style-type: none">• Tutored fellow undergraduate students in Computer Science, Math and Physics courses.	
ACHIEVEMENTS	Recipient, Penn State Women in Engineering "The Most Innovative Design" 2019 Recipient, Penn State University "The President's Freshmen Award" 2018	