

Vennila Pugazhenth

vkp5086@psu.edu 501 Vairo Blvd, State College, PA 16803

EDUCATION	Bachelor of Science in Computer Science The Pennsylvania State University, State College, PA Dean's List: 2017-Present Anticipated Graduation: May 2021	GPA: 3.84/4.00
SKILLS	Programming Languages: C, C++, Java, Python, Rust, Racket Frontend: HTML, CSS, JavaScript Backend: Django, Flask, MongoDB, MySQL Cloud Computing: AWS Frameworks: Angular, React, React Native Embedded Programming: Verilog, MATLAB Data Science: TensorFlow, Keras, PyTorch, Brian Computer Vision: OpenCV 3D Design: Blender App Development: Flutter, Android Studio	
PROJECTS	GitHub: https://github.com/VennilaPugazhenth <ul style="list-style-type: none">• A file system interface on top of a virtual storage device with a LRU cache that supports network communication with a server.• A Hidden Markov Model (HMM) for Part-Of-Speech (POS) tagging.• A chrome extension which is a combination of features of CTRL+F and Google search.• A five-stage pipelined CPU in Verilog.	
RESEARCH EXPERIENCE	Equity REU Undergraduate Research Assistant The Pennsylvania State University, University Park, PA Aug 2019-Aug 2020	<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	