Vinay Mehta

Work Experience

FlexLogix
Technical Marketing Manager
1Q20 –

- Interdisciplinary role leading technical marketing for the InferX chip and board product line of convolutional neural network accelerators.
- Identified the need for direct senior management and engineering communication channels; stood up reviews and acted as the operational executor for the CEO.
- Built and maintain performance, power estimators for both customer engagement and internal product requirement discussions; track competitors' products to assess our market position and value prop.
- Create and present marketing content at industry trade shows (Linley Processor Conferences) and via paid media channels.

Lyft
Hardware Engineer
3Q18 – 1Q20

- Rose to technical lead in the team that designed, built, and verified the next-generation compute hardware for Lyft's self driving system.
- Identified operational and design shortcomings in the existing vehicle compute platform, and determined compute requirements of the autonomy stack for the next 3-4 years.
- Explored different system architectures balancing fault tolerance, reliability, and performance goals with mass, volume, thermal, and cost constraints; achieved cross team consensus from mechanical, thermal, systems, and product teams.
- Demonstrated quantization and concurrent execution for in-vehicle neural networks. Directly managed two summer interns evaluating edge and datacenter inference accelerators.

Columbia ARCADE Lab
Undergrad Researcher
2Q17 – 4Q17

- Studied memory access patterns for sparse convolutional neural networks and implemented an accelerator in SystemVerilog for restricted Boltzmann machine inference.
- Parallelized the reference baseline CPU inference implementation.
- Evaluated the performance of publicly available RISC-V cores.

SpaceX
Software Intern
2Q16 – 3Q16

- Built a Java application that queried and downloaded part files from the central Teamcenter PLM repository onto 3D printers in the additive manufacturing lab.
- Maintained the interface and functionality of the Engineering Change Notice form, adding support for different Falcon 9 Blocks and Variants.

Argosy International
Operations Intern
2Q15 – 3Q15

- Built a model to determine candidate locations for a value-added aluminum honeycomb processing facility in the US. Model and results presented to the board of directors, who ultimately elected to build the facility in same county in Alabama as the model's highest ranked ZIP code.

Education

Columbia University
B.S. Computer Engineering
Class of 2018, GPA: 3.8 / 4.0

Advanced Logic Design • Operating Systems • Computer Vision • NLP • System-on-Chip Platforms • Embedded Scalable Platforms • HW/SW Formal Verification • Computer Architecture (+TA)

Skills

Programming	C / C++, Python, Java, MATLAB
Hardware Description	SystemVerilog, SystemC
Libraries	PyTorch, TensorFlow, TensorRT, CUDA, ROS, OpenCV
Graphic Design	Adobe Photoshop, Illustrator, InDesign, Premiere