Qasim Wani

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EDUCATION

B.S. Computer Engineering, Specialization: Machine Learning, Expected Graduation May 2022

Virginia Tech. Blacksburg, VA　　　　　**In-Major GPA:** 3.79　　　　**GPA:** 3.69　　　　Dean's List

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SKILLS

Deep Learning	Python	C++	JavaScript	PyTorch
Graph Theory	Node.js, MongoDB	Unix/Linux	Product Strategy	Android (Kotlin)

WORK EXPERIENCE

Infinitus Systems – ML Intern (Member of Technical Staff) | *May. 2022 – August. 2022*
- Incoming ML engineer developing conversational NLP models to improve state-of-the-art healthcare UX.

Qualcomm – ML Intern (Graduate Position) [Return Offer] | *May. 2021 – August. 2021*
- QoS Optimization using a novel Graph based Deep Learning algorithm by utilizing counter-intuitive ML techniques.
- Led the innovation of interpretability driven algorithm that reduces chip simulation debug time from **3-4 weeks** to **1-2 hours.**
- Developed end-to-end ML pipeline using PyTorch. Released API for internal use within Qualcomm.

GMAC Intelligence – Core ML Engineer | *June. 2020 – August. 2020*
- Developed Reinforcement Learning algorithms for training bipedal robots in complex environments.
- Reduced convergence time by over 130% by training models on TPU and GPU architectures using parallel computing.

PERSONAL PROJECTS & ACADEMIC RESEARCH

HitchHiqe | Founder | *May. 2019 – July. 2020*
- Safe and convenient long-distance ridesharing platform for college students.
- **$20,000** acquisition offer for novel end-to-end ML algorithm that reduces ride search time on Facebook by **540x**.
- Funding [opportunity](#) from Justin Kan (Twitch founder) and Garry Tan (Y Combinator and Initialized Capital).
- Implements Computer Vision (GCP Vision API) for authenticating driver's license, recommender system using KNN for recommending users with rides, and NLP algorithms for searching and recommending best rides on Facebook in 2-5 seconds.
- Featured on Fox News, [Collegiate Times](#), MIT, and [Virginia Tech - Pamplin College of Business.](#)
- Wrote over 50,000 lines of code under 6 months using JavaScript (Node.js), Python, & MongoDB

Preventiv – Novel Hierarchical Contact Tracing App | *February. 2020 – July. 2020*
- Created and released one of the first Contact Tracing apps available worldwide and made it available for [open-source](#).
- Implemented novel recursive contact tracing algorithm using GCP for dense communities with O(N) time complexity.
- Aided Virginia Tech to implement its contact tracing solution to over 40,000 users.
- Top 10 finalist for Virginia Tech's [Tech Together Campaign](#) challenge on contact-tracing and infrastructure innovation.
- Recognized in Health Hotline podcast, [Collegiate Times](#), and VT News.

Robust Representation Learning | Stanford University x Salesforce Research | *March. 2021 – October. 2021*
- Developed MASIW – an ML algorithm for detecting and adapting to out of distribution data.
- Created novel label shift algorithm; paper under review at NeurIPS, the most selective AI conference in the world.
- Improved accuracy on current techniques by **15%** and state-of-the-art label shift algorithms by **7%**.

LeetHub – Top Trending JavaScript Repository, GitHub | *November. 2020*
- Chrome [extension](#) that automatically pushes code to GitHub when passing all tests on any Leetcode problem.
- 12K+ users (82% weekly active users) used it over **8 million** times. **150x** speed improvement!
- 1.6K+ stars; 450+ forks; 3 acquisition offers. Open-sourced code with over 10 contributors. $0 spent on advertising!

AWARDS

Kleiner Perkins Engineering Fellow | Kleiner Perkins | *May. 2022*

8VC Engineering Fellow | 8VC | *April. 2022*

Founders Fellow | On Deck Capital | *April. 2022*

Winner of CityLearn Competition | BuildSys Conference | *November. 2021*
- Developed a novel zeroth-order implicit RL framework, beating next-best solution (out of 24 teams) by **120%**.

Top 8 Startups of 2020 Fiscal Year | Virginia Tech | *March. 2020*
- HitchHiqe was voted as Top 8 startups for 2020 academic year across all students and alumnus from Virginia Tech.

Turing Undergraduate Fellow | Virginia Tech Research Center at Arlington | *December. 2020*

5x Hackathon Winner | MLH | *September. 2019 - March. 2022*
- Won hackathons at MIT (best disaster relief hack), Duke University (best health hack), University of Washington (best technical hack), and Virginia Tech (best Machine Learning hack).