# **Qasim Wani**

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#### **EDUCATION**

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

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

**SKILLS** 

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

#### **WORK EXPERIENCE**

#### PathAI (Series C) - Machine Learning Engineer | Sept. 2022 - Present

- #1 BioTech startup; Backed by Kaiser Permanente, General Catalyst, Tiger Global, and 8VC.
- Researching graph-based methods for creating AI diagnosis and recommendations for non-oncology related diseases.

## Infinitus Systems (a16z, Kleiner Perkins) - Member of Technical Staff Intern | May. 2022 - August. 2022

- Developed auto-labeling tools to accelerate the process of labeling NLP data by 6x.
- Finetuning transformer-based models on OOD data for intent and entity labeling. Released end-to-end API as internal tool.

## Qualcomm - Machine Learning Intern (Graduate Position) [Return Offer] | May. 2021 - August. 2021

- Quality of Service (QoS) Optimization using spatial-temporal Graph Neural Networks.
- 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...

## PERSONAL PROJECTS & ACADEMIC RESEARCH

#### HitchHige | 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 (CEO Y Combinator).
- 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 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 <u>Tech Together Campaign</u> 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 coding problem.
- 25K+ users (82% weekly active users) used it over 20 million times. 150x speed improvement!
- 2.5K+ stars; 700+ forks; 3 acquisition offers. Open-sourced code with over 10 contributors. \$0 spent on advertising!

#### **AWARDS**

Engineering Fellow | Kleiner Perkins | June. 2022

8VC Engineering Fellow | 8VC | May. 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.

### 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).