



Honson Tran

R&D. SWE. ML/AI. Computer Vision.

I'll keep it short and sweet. I'm here to create impact. I'm here for change. I'm here to chip at the slate of history.

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WORK EXPERIENCE

Machine Learning Engineer Intern Etsy, Inc.

07/2020 - Present

Remote

- One of 24 students selected after submitting a proposal to implement computer vision features to enhance the customer shopping experience.
- Responsible for designing a proof-of-concept image search on the consumer side.
- Responsible for implementing image search to search for similar items to moderate copyright infringement.

MLH Fellow: Machine Learning & Computer Vision Major League Hacking (MLH)

06/2020 - 08/2020

Remote

A 12 week internship alternative for students interested in becoming software engineers. Instead of an internship at a single company, we contribute to the type of Open Source projects that every company depends on.

- Worked on AliceVision, a photogrammetric computer vision framework.
- Implemented HNSWLib, an Approximate Nearest Neighbors algorithm, into AliceVision's model reconstruction pipeline.

Software Engineer & ML/AI Researcher Weill Cornell Medicine @ Cornell University

04/2019 - 08/2020

New York, NY

Currently in process of co-registering CT and fluoroscopic imaging to create a real-time, 3-D approximating catheter aid for cardiovascular interventions.

- Proposed and successfully implemented U-Net for catheter detection with 97% accuracy.
- Responsible for maintaining and contributing to code base for pre/post-processing and ML models.
- Researching different models for spine detection (i.e. Mask-RCNN) and pipelining to the AR/VR team.

Machine Learning & Software Engineer Intern BMW Group

05/2019 - 08/2019

Mountain View, CA

- Implemented software features for predictive analytics to improve the BMW driving experience.
- Researched methods to implement and improve driver safety and reduce driver distraction.
- Gained experience in geospatial processing tools and APIs such as QGIS, OpenStreetMap/OverPass, and Fiona/Shapely.
- Gained experience in front-end and back-end development using Android Studio and Node.js.

EDUCATION

Computer Science, B.S Rutgers University

09/2015 - 05/2020

New Brunswick, NJ

Computer Science (Visiting Student, Summer'19)

Stanford University

06/2019 - 08/2019

Stanford, CA

- CS221: AI: Principles & Techniques
- STATS202: Data Mining & Analysis

PUBLICATIONS

Technical Paper

A Deep Learning Approach for Marker-less Cerebral Palsy Classification Using Gait Video

Author(s)

Honson Tran, Rahil Mehrizi, Xi Peng, Shaoting Zhang, Ming Shao, and Kang Li

Pending Review

Engineering (ISSN: 2095-8099)

Poster

Augmented Reality-Guided Transcatheter Septal Puncture in Structural Heart Disease Interventions

Author(s)

Sun-Joo Jang, Jun Liu, Alexandre Caprio, Honson Tran, Subhi J. Al'Aref, S. Chiu Wong, Simon Dunham, Bobak Mosadegh

11/16/2019

American Heart Association Scientific Sessions 2019

EDUCATION INITIATIVES

Certified Instructor (Fundamentals of Deep Learning for Computer Vision)

NVIDIA Deep Learning Institute

04/2019 - Present

Piscataway, NJ

- Responsible for teaching and providing students and industry professionals hands-on training by leveraging computer vision and AI concepts.

WORK EXPERIENCE

Computer Vision & ML/AI Researcher

Computational Biomedicine Imaging and Modeling Center @ Rutgers University

09/2019 - 05/2020

Selected as an Aresty Undergraduate Researcher to work on using AI and Computer Vision for medical imaging and gait analysis.

Piscataway, NJ

- Researched a computer vision model to simplify equipment standards and provide a quantifiable severity ranking system for cerebral palsy patients.
- Shadowed researchers during model design (91.7% accuracy, 83.3% sensitivity, and 100% precision).
- Gained experience using OpenPose, OpenCV, PyTorch, and interpreting gait measurement equipment.

Computer Vision & ML/AI Research Intern

BMW Group

08/2018 - 12/2018

Spartanburg, SC

- Researched text recognition algorithms to update inventories responsible for the production of 1400+ manufactured vehicles for daily export.
- Customized and tuned multiple models using OpenCV and TensorFlow/Keras to increase accuracy of recognition models by leveraging custom-made algorithms.
- Responsible for initial research, error analysis of text recognition model, training and labeling of data sets, and hardware prototypes for data collection.

Lead Software Engineer & Technical Advisor

NLC Support

02/2018 - 08/2020

Piscataway, NJ

A top-leading Support Agency that provides services to people with disabilities.

- Successfully pitched and launched a brand new employee database in Angular from scratch to improve efficiency of 30+ staff members to document and exchange information regarding clients.
- Created company website, implemented admin dashboard, and designed an employee website-login for resources.
- Responsible for all technical training and consulting for incoming and current employees.
- Technology implementations contributed to increased valuation of company to \$500k, projected for \$3 million by end of 2019.

Founder

IonX Technologies

05/2008 - 05/2020

Egg Harbor Twp., NJ

Local computer/mobile repair, web design, and freelance development business.

- Launched in South Jersey in middle school to meet the demand of cheaper electronics repairs.
- Serviced and consulted over 500+ customers & electronics, including laptops, desktops, Android devices, and iDevices phones & tablets.
- Expanded skillsets to offer web & mobile development and technical consultations for companies.

TECHNICAL SKILLS

Programming & Databases

Git, C, C++, Java, JavaScript, TypeScript, Angular, RxJS, Node.js, R, MATLAB, HTML/CSS, SQL, Firebase/FireStore

AI & Machine Learning

Python, OpenCV, TensorFlow, Keras, Pytorch, AliceVision, BentoML

IDEs

Android Studio, XCode, Unreal Engine

Hardware

Arduino, Raspberry Pi

EDUCATION INITIATIVES

Student Executive Board Head & Head of Curriculum Design

Road to Silicon V/Alley Program (RSVP) @ Rutgers University

10/2019 - Present

Piscataway, NJ

- A disruptive initiative to bridge East Coast to Silicon Valley & to create Silicon Alleys around the country.
- Oversee RSVP and its operations (funding/investments, strategic relationships, career advancement, mentorship, events, etc).
- Organized the NVIDIA computer vision workshop on campus.

Teaching Fellow

Summer STEM Institute (SSI)

06/2020 - 08/2020

Remote, US

- SSI is a 6-week summer program consisting of a data science and research bootcamp, speaker series, and mentored research project.
- Managed 600+ students internationally in developing data science research projects.
- Held and moderated 15+ speaker events for students.
- Answered over 500+ student-posted questions.

ACHIEVEMENTS

Villanova Student Entrepreneurship Competition (VSEC): 2nd Place, Better Bees (05/2020)

Better Bees is an autonomous drone pollination solution to address declining bee populations.

Forbes: 30 Under 30 Scholar (08/2019)

One of 1000 selected to attend the Forbes 30 Under 30 Summit in Detroit, Michigan.

Facebook AI: Pytorch Scholarship Challenge Nanodegree Recipient (Udacity) (10/2018)

1 of 10,000 recipients to receive a scholarship to attend the Udacity nanodegree.

Harry Gessner Memorial Scholarship (08/2017)

Awarded to those who show commitment and passion to their work in the Computer Science & Engineering fields.

Stanford Rebuild Participant (06/2020 - 08/2020)

A global innovation sprint to develop solutions for the wide range of challenges and opportunities we will face as we emerge from the COVID-19 pandemic.

LEADERSHIP

Chief Officer (09/2019 - 05/2020)

Google Developer Student Club @ Villanova University

Board Member (ResX Incubator) (09/2019 - 05/2020)

Rutgers Entrepreneurial Society

Board Member (Director of 3D Printing) (04/2019 - 04/2020)

Rutgers IEEE

Student Leader: Mentor for Deep Learning Nanodegree (10/2019 - 01/2019)

Udacity