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

Technical Consultant
Latent AI

10/2020 - Present   *Princeton, NJ*

An early stage venture spinout of SRI International, dedicated to building solutions that enable the adaptive edge to transform AI processing.

- Responsible for software development and benchmarking of AI models on edge devices.
- Responsible for compiling and setting up necessary environments for development boards.

Machine Learning Scientist Intern
Etsy, Inc.

07/2020 - 10/2020   *Remote, US*

- Created a proof-of-concept ML model to detect similar usage of assets that generalized to other apparel/accessories.
- Improved our base model from 22% to 94%, a ~4x improvement.
- Successfully pitched and well received by CEO and heads of Data Science & Machine Learning department.

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

06/2020 - 08/2020   *Remote, US*

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.

- Successfull contributed to AliceVision, a photogrammetric computer vision framework.
- Implemented HNSWLib, an Approximate Nearest Neighbors algorithm, into AliceVision's model reconstruction pipeline.
- Featured on Github's blog for my previous projects and work, specifically Cornell.

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

04/2019 - 08/2020   *New York, NY*

Machine learning lead for 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*

BMW's Technology Office for research and innovation in Silicon Valley.

- 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 (QGIS, OpenStreetMap/OverPass, Fiona/Shapely) and front/back-end (Android Studio, 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 INITATIVES

Certified Instructor (Fundamentals of Deep Learning for Computer Vision)
NVIDIA Deep Learning Institute

04/2020 - 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   *Piscataway, NJ*
Selected as an Aresty Undergraduate Researcher to work on using AI and Computer Vision for medical imaging and gait analysis.

- 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*
Located on Clemson University's International Center for Automotive Research, Positioned in BMW's Innovation Department.

- 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 as 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

Hardware
Arduino, Raspberry Pi

EDUCATION INITATIVES

Student Board Advisor & 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

Afore Capital Zero-to-1 Venture Fellow (09/2020 - 10/2020)
A cohort of 100 select founders figuring out the startup journey.

Stanford Rebuild Participant (06/2020 - 08/2020)
A global innovation sprint to develop ideas to combat post-COVID-19.

Villanova Pitch Competition: 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)

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

Harry Gessner Memorial Scholarship (08/2017)
Awarded to those who show commitment and passion to their work in the Computer Science & Engineering fields.

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 (10/2018 - 01/2019)
Udacity