# Avyuk Dixit

avyukd@umich.edu ❖ (703) 559-2375 ❖ Ann Arbor, MI
LinkedIn: https://www.linkedin.com/in/avyuk-dixit-a362a4156/
GitHub: https://github.com/avyukd

## WORK EXPERIENCE

| **Enterprise e-Support, Inc.** | **June 2020 – August 2021** |
|---|---|
| *Software Developer* | *Springfield, VA* |

- Enterprise e-Support, Inc. is an IT consulting firm providing professional services to the federal government.
- Built internal web application to replace external tool for go/no-go decisions on RFPs. Used Flask and React. Deployed on Heroku. Total cost-savings of $6000/yr.
- Streamlined recruiting process by creating machine learning resume parsing utility. Tool is now integrated with day-to-day operations at the company; used for ~5000 resumes. Worked in Python. Used Gensim and Spacy for NLP.
- Filed non-provisional patent for novel machine learning approach to automated taxonomy generation.

| **Harvard Medical School/Johns Hopkins University** | **June 2019 – December 2020** |
|---|---|
| *Machine Learning Researcher* | *Baltimore, MD* |

- Worked under the guidance of Dr. Michael Vincent Boland on a project to assess glaucoma progression in patients from multiple data sources using machine learning (Convolutional LSTM).
- First-authored research paper and published in the peer-reviewed *Ophthalmology* journal, the premier publication of the American Academy of Ophthalmology. DOI: https://doi.org/10.1016/j.ophtha.2020.12.020

## PROJECTS

| **Navsearch** | **June 2021 – Present** |
|---|---|
| *Lead Developer* | *Ann Arbor, MI* |

- Building save, search, and share bookmarking software. Built using Elasticsearch, FastAPI, React, Chakra UI, and Firebase. Deployed on Heroku. See here: https://navsearch.herokuapp.com/
- Pitched to 75 & Sunny VC, Zillow co-founder Spencer Rascoff's family office.

| **Equity Dashboard** | **July 2021 – Present** |
|---|---|
| *Side Project* | *Ann Arbor, MI* |

- Building a personalized investment platform to help inform my investment decisions. Built with FARM stack.
- Features including valuation and dashboards for investment themes, semantic search over bookmarked research (using GPT-3), watchlist, commodity supply demand models, and notetaking. Informed alpha of >100% on personal portfolio.

| **TJHSST Computer Systems Lab** | **September 2018 – April 2019** |
|---|---|
| *Student Researcher* | *Alexandria, VA* |

- Developed stacked machine learning algorithm that uses non-contact heart rate detection, pose estimation, and facial emotion recognition to determine instances of violent behavior in real time.
- First place in category, school, and regional science fairs. Grand Prize alternates for international science fair (ISEF).
- Worked with 17+ hours of video footage to train a model with ~80% accuracy.

## EDUCATION

| **University of Michigan** | **August 2020 – May 2023** |
|---|---|
| *Computer Science, GPA: 4.0/4.0* | *Ann Arbor, MI* |

- William J. Branstrom Freshman Award: Recognizes freshmen who rank in the upper five percent of their class.

## ACTIVITIES

| **Atlas Digital Consulting** | **August 2020 – Present** |
|---|---|

- Pro-bono tech consulting (mobile/web dev, database management, and machine learning) for local businesses.

| **Quantitative Investment Society** | **August 2021 – Present** |
|---|---|

- Leading project to create unsupervised learning model to identify opportunities for pairs trading and factor investing.

| **Math 217 Peer Tutor** | **September 2021 – Present** |
|---|---|

- Paid by university to tutor Math 217 (proof-based linear algebra) students. Invited to tutor based on A+ grade in class.

## SKILLS & INTERESTS

- **Programming Skills:** Languages – Python, C++, JavaScript, Java, HTML5/CSS3, R, SQL; Backend – Flask, FastAPI, Django, Node.js, Electron, MongoDB, Firebase, PostgreSQL, SQLite; Data Science – Tensorflow, Keras, OpenCV, PyTorch, Spacy, Gensim; Frontend – React.js, Material UI, Chakra UI, Tailwind; Other – Elasticsearch, Heroku, AWS, Git, Gitlab
- **Interests:** Investing, hiking, traveling, philosophy, eating food