JOSHUA D'ARCY, M.D., M.ENG.

@ joshuadrc@gmail.com 📞 810-358-8826 📍 Chicago, IL in linkedin.com/in/joshua-d-arcy ⌂ github.com/joshua-drc

WORK EXPERIENCE

Lead Data Scientist
Edge Analytics, Inc.

📅 May 2022 – December 2023   📍 Los Altos, CA

- Led technical work for machine learning and cloud infrastructure projects at early stage startups and Fortune 500 companies.

Senior Machine Learning Software Engineer
Ablacon, Inc.

📅 January 2021 – May 2022   📍 Santa Clara, CA

- Developed machine learning algorithms and a full stack software infrastructure (Python / React) to improve atrial fibrillation outcomes.

Data Analyst
Duke University | Department of Psychiatry

📅 June 2019 – December 2020   📍 Durham, NC

- Used image analysis to identify high-risk environments for addictive behaviors. Employed transfer learning to build TensorFlow models.

Software Consultant
Pneumonics

📅 June 2019 – August 2020   📍 Durham, NC

- Rebuilt an existing breath detection algorithm (Python), introduced features for a Teensy serial (C/C++), and developed a custom dashboard (HTML/CSS/Javascript).

Project Manager
Duke University | Department of Biostatistics and Bioinformatics

📅 June 2019 – May 2020   📍 Durham, NC

- Led a team of developers towards producing a proactive, machine-learning, and literature-based nutrition assistant via a mobile application.

EXTRACURRICULARS

Entrepreneurial Ambassador
Duke University | Department of Innovation and Entrepreneurship

📅 January 2017 – May 2017   📍 Durham, NC

- Forged connections between departments to support interdisciplinary entrepreneurship. Provided campus resources to launch research innovations into the marketplace.

Healthcare Markets and Policy for Practitioners
Duke University | School of Medicine

📅 September 2015 – June 2018   📍 Durham, NC

- Designed, organized, and managed an accredited course at Duke University School of Medicine.

EDUCATION

Master of Electrical and Computer Engineering (M.Eng.)
Duke University School of Engineering

📅 December 2020

GPA: 4.0 Barr-Spach Scholar

Doctor of Medicine (M.D.)
Duke University School of Medicine

📅 May 2020

Dean's Merit Scholar

Faculty Wives Scholar

Bachelor of Biomolecular Sciences (B.S.)
University of Michigan Ann Arbor

📅 June 2015

GPA: 3.6

SKILLS

Python ●●●●●
Javascript / Typescript ●●●○○

Machine Learning   Deep Learning

Natural Language Processing

React   Full Stack Development

Image Processing   TensorFlow

Infographics   Data Processing

Team Leadership   Project Management

PROJECT HIGHLIGHTS

Find more projects on my ⌂ profile.

Accelerated Drug Design
Built infrastructure for machine learning accelerated drug design at a Fortune 500 company.

Wearable Sensor Algorithms
Developed scalable, deployable deep learning algorithms for key biometric prediction using IMU sensors.

Smart Grid Optimization
Used classical statistical methods for smart electrical grid forecasting at a Fortune 500 company.

AUTHORSHIP

Releasing the CRaQAn (Coreference Resolution in Question-Answering): An open-source dataset and dataset creation methodology using instruction-following models

In Progress

🗓 Oct 2023

Authors: Rob Grzywinski, **Joshua D'Arcy**, Rob Naidoff, Ashish Shukla, Alex Browne, Ren Gibbons, Brinnae Bent

- -

Real-Time Prediction of Environment-Associated Smoking Risk

Journal of Medical Internet Research

🗓 Sep 2020

Authors: Matthew Engelhard, **Joshua D'Arcy**, Jason Oliver, Rachel Kozink, Abhishek Jadhav, Joseph McClernon

- -

Semantic Nutrition: Estimating Nutrition with Mobile Assistants

Machine Learning in Healthcare Conference (Clinical Abstract)

🗓 Aug 2020

Authors: **Joshua D'Arcy**, Sabrina Qi, Dori Steinberg, Jessilyn Dunn

- -

Neural Conditional Event Time Models

Machine Learning in Healthcare Conference (Research Track)

🗓 Aug 2020

Authors: Matthew Engelhard, Samuel Berchuck, **Joshua D'Arcy**, Ricardo Henao

- -

A Path for Translation of Machine Learning Products into Health Care Delivery

European Medical Journal

🗓 Jan 2020

Authors: Mark Sendak, **Joshua D'Arcy**, Sehj Kashyap, Michael Gao, Marshall Nichols, Kristin Corey, William Ratliff, Suresh Balu

- -

Deep LSTM Transfer Learning for Personalized ECG Anomaly Detection on Wearable Devices

AOA Day at Duke University School of Medicine (Poster)

🗓 Aug 2018

Authors: **Joshua D'Arcy**, Ric Telford
🏆 Winner of Best Clinical Research Poster Award