Jacob Platin

(314)-605-4110 • jplatin@seas.upenn.edu • bit.ly/jplatin • github.com/jrplatin • linkedin.com/in/jacob-platin

EDUCATION AND SKILLS

University of Pennsylvania, School of Engineering and Applied Science — **Philadelphia, PA**
Master of Science in Engineering in ***Computer Science,*** *GPA 3.4/4.0* — August 2017 - May 2021

- **Relevant Coursework**: Machine Learning, Network System Design, Algorithms, Deep Learning

University of Pennsylvania, School of Engineering and Applied Science — **Philadelphia, PA**
Bachelor of Science in Engineering, Majors in ***Computer Science*** & ***Economics,*** *GPA 3.4/4.0* — August 2017 - May 2021

- **Relevant Coursework**: Cloud Computing/Scalability, Econometrics, Game Theory, Data Structures, Software Design
- **Relevant Languages:** Python (strongest), C++/C, Java, Go, R, Groovy, SQL, OCaml, Swift, Ruby, Bash
- **Skills and Frameworks**: PyTorch, AWS (EC2 + EBS/EFS), Jenkins, Kubernetes, Azure/GCS, Express, CSS, Angular, Rails, Git
- **Areas of Interest:** Reliable neural networks, automation, testing, full-stack integration, cloud computing, infrastructure

ETH Zurich, Departments of Computer Science and Economics — **Zurich, Switzerland**
Exchange Program — September 2019 - December 2019

- **Relevant Coursework**: Computer Architecture, Reliable Artificial Intelligence, Wireless/Mobile Computing

EXPERIENCE

Aidoc | *AI Engineering and Cloud Computing Intern* | Tel Aviv, Israel — **June 2019 - August 2019**

- Deployed medical (including pulmonary embolism and intracranial hemorrhage) prediction algorithms and data selection tools on AWS EC2 instances with a robust EFS and EBS storage solution using Python
- Participated in weekly discussions on state-of-the-art medical deep-learning algorithms and used Keras to test the feasibility of these developments on Aidoc's current prediction algorithms

Strayos | *Data Science and Full-Stack Intern* | St. Louis, MO — **May 2018 - August 2018**

- Implemented a role-based action control (RBAC) protocol within Strayos' web app using full-stack knowledge, which included utilizing Ruby, Rails, SQL, Angular, RxJS, CSS, JavaScript, and HTML
- Created internal and end-user documentation and used SQL, PostgreSQL, and SSH protocol to migrate while also analyzing user data via Hadoop and performing basic Kubernetes tasks

Saint Louis University | *Research Assistant* | St. Louis, MO — **May 2016 - July 2016**

- Assisted Dr. Mark McQuilling in analyzing data from a polysonic (650-800MPH) wind tunnel using Matlab and R
- Presented my paper, "Developing New Processing Capabilities to Analyze Turbulent Polysonic Wind Tunnel Readings," to an audience of over 100 students

PROJECTS AND TECHNICAL LEADERSHIP

CAS-NN (Commercial Air Safety – Neural Network)| *Lead* | Philadelphia, PA — **June 2019 - Present**

- Currently developing a robust neural network to detect maintenance anomalies in commercial aircraft
- Anomalies include metal fatigue and fuse-pin misalignment, and adversarial defense techniques, including PGD, are used

Penn Aerospace Club | *Co-Head of Team* | Philadelphia, PA — **August 2017 - Present**

- Spearhead Penn's 30-person high-altitude balloon team; led 6 successful launches reaching 60,000+ feet on a PCB-based platform that collects over 8 varieties of atmospheric data and 3 varieties of visual data
- Designed an Arduino-based system to facilitate balloon-based (2-way) satellite communication using RockBlock

DATF (Domestic Autos Time Series Forecast) | *Author* | Philadelphia, PA — **January 2019 - Present**

- Currently undertaking advanced economic time series forecasting using R as part of Penn Economics

NDVI Estimator | *Sole Programming Lead* | Philadelphia, PA — **January 2019 - May 2019**

- Implemented a Python library to estimate the normalized difference vegetation index of an RGB image

NBA RankSVM | *Co-Programming Lead* | Philadelphia, PA — **August 2018 - February 2019**

- Created a Python library that implements the RankSVM machine learning algorithm to predict NBA (basketball) final standings for over 40 future seasons using only past season data in CSV format

TAMID Fund | *Fund Team Leader* | Philadelphia, PA — **August 2017 - December 2018**

- Managed over $10,000 in diversified assets; achieved 13% YoY growth; recruited 20 new members

OTHER LEADERSHIP

Phi Kappa Psi | *President* | Philadelphia, PA — **November 2019- Current**

- Leading the Iota chapter at Penn, which has over 70 members and partakes in a variety of on-campus community events