Nick Sarris

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github.com/nicksarris

Education –

University of Virginia - School of **Engineering and Applied Sciences:** Majoring in CS with a focus in Software Engineering / Machine Learning

Classes Taken —

Computer Science:

CS2102: Discrete Math, CS2110: Software Development Methods, CS2150: Program and Data Representation, CS3102: Theory of Computation, CS3240: Advanced Software Development, CS3330: Computer Architecture, CS4102: Algorithms, CS4414: Operating Systems, CS4501: Machine Learning, CS4630: Defense Against the Dark Arts, CS4720: Mobile Application Development, CS4753: Electronic Commerce Technology

Math/Sciences:

APMA1110: Single Variable Calculus II, APMA2120: Multivariate Calculus, APMA2130: Ordinary Differential Equations, APMA3080: Linear Algebra, APMA3100: Probability, CHEM1610: Chemistry I for Engineers, PHYS1425: Physics I, PHYS2415: Physics II

Skills –

Languages/Toolkits:

Python, Flask, Django, HTML, CSS, Javascript, React.js, Redux, Webpack, Node.js, MongoDB, AWS, Express, REST, JQuery, C++, SQL (Postgresql, MYSQL, etc), Bash, Latex, Solidity, Swift, Firebase, C, Java, PHP

Software:

Microsoft Office (Word, Excel, etc), Linux, Mathematica, Matlab, CAD modeling (AutoCAD), Unity, Github (Gitkraken, etc), Various IDEs (Pycharm, Eclipse, Atom, etc)

Jun '19 Technical Intern

Northrop Grumman

Used Python and Flask to implement and test a REST API leveraging a document summarization micro-service implementing Machine Learning (NLP) techniques that I built using a BERT-Base model finetuned on an expansive dataset of CNN news articles

Jun '18 Technical Intern

Northrop Grumman

Used Python, PyQT, and Django to code a GUI and web application that implemented Machine Learning (NLP) techniques to classify and score blog articles found on the Internet, exploring how similar the content was to cybersecurity TTPs (Tactics, Techniques, and Proce-

dures) found on MITRE's ATTACK table.

Jun '15 Research Intern

Nasa Langley Research Center

Used Python to code a program that implemented Machine Learning (Image Processing) techniques to analyze/scan carbon-fiber sheets for imperfections after they had been hurled at a wall, testing their structural integrity for later use.

Research and Projects

Stipend, the Freelancing Platform Current

> Leveraged existed blockchain code to develop the blockchain and wallets currently integrated and running smoothly on the Stipend network of more than five thousand computers. Beyond this, I'm working alongside three other developers to code the Stipend platform, a scalable responsive, freelancing web application built off of the Stipend blockchain

Current Kaggle/Numerai

For the last five years, I've been competing in various Machine Learning competitions on both Kaggle and Numerai, learning all I can throughout. Kaggle is a site where companies sponsor competitions for anyone to participate in, whereas Numerai is a cryptocurrency hedge fund that hosts weekly competitions to use anonymized data in order to predict future stock market prices.

Current **Emparon**

> Currently building from scratch an expansive web application (SaaS) that implements a MERN (MongoDB, Express, React.js, Node.js) tech-

nology stack.

Feb '19 Algorithmic March Madness

> Created an extensive Machine Learning model that predicts the outcome of March Madness games using inferences gained from a variety of sources, including Kenpom's ratings, the Massey Ordinals, and Ve-

gas Odds

Sep '17 Prism, an Autonomous Trading Bot

> Built from scratch an automated trading bot for cryptocurrency that leverages Bittrex's (a cryptocurrency exchange) API to process individual trades.

Competitions

| Jun '19 | Jigsaw Unintended Bias in Toxicity | Kaggle (45th / 3165) |
|---------|--------------------------------------|-----------------------|
| Apr '16 | Expedia Hotel Recommendations | Kaggle (89th / 1974) |
| Feb '17 | Allstate Claims Severity | Kaggle (114th / 3055) |
| Jun '16 | Predicting Red Hat Business Value | Kaggle (108th / 2271) |
| Apr '16 | Home Depot Product Search Relevance | Kaggle (137th / 2124) |