Nico Kokonas

Master Data Engineer · Offensive Cybersecurity Engineer · Software Engineer (Backend, Scraping)
San Luis Obispo, CA

San Euro Obispo, C

nicoandmee ⊌ nicoveritas in Nico Kokonas ⊌ @nicoandmee



About Me_

I am a hands-on, entrepreneurial-minded software engineer working in the industry since age 14. I have proven track record building production-scale backend systems that delivered millions in value through web scraping and automation at scale. My knowledge of offensive security gives me a unique perspective on code that I write, and I have direct experience collaborating with federal law enforcement on cybercrime investigations. I am a Computer Engineering graduate now pursuing a liberal arts education at the University of Austin (full-ride) while seeking flexible, remote opportunities that accommodate transitions between full-time and part-time commitment levels to support academic pursuits and maintain professional growth.

Experience _____

Spacecraft Operations Engineer Intern

Palo Alto, CA

NASA AMES RESEARCH CENTER

May 2014 — August 2014

- As part of a team of around 10 engineers, worked on satellite development and deployment projects.
- Personally performed the prototyping and development of a Uniform Light Source for infinite focus lens calibration, a critically important component for the satellite to perform imaging tasks.
- Provided cross-functional support assisting with mission-critical infrastructure across the electrical and software systems.

Offensive Cyber Security Engineer

Denver, CO

AZORIAN CYBER SECURITY

April 2015 — September 2015

- Conducted network reconnaissance and penetration testing on target infrastructure my focus was primarily on Javascript in particular and Web applications more generally.
- For consumer clients, we successfully recovered stolen funds and returned control of hacked accounts from malicious actors to the rightful owners.
- Developed new and maintained existing in-house tools to support our Red Team operations, primarily in Python and .NET.
- Worked cohesively as part of a small team of three security engineers, both in physical engagements in the field and in the office, performing remote operations.

Master Data Engineer

San Luis Obispo, CA

GAINE SOLUTIONS, INC.

January 2016 — August 2016

- Played a central role in the development of the Sanator Provider Registry, now an industry standard for healthcare data management in California, as required by state law.
- Gained experience working in Master Data Management as part of a team of engineers who challenged me to grow my skillset.
- Sharpened my SQL knowledge and seeded a deep interest in databases and how they work on an internal level.
- Learned the intricacies of HIPPA and PII compliance issues associated with managing healthcare data.

CTO Los Angeles, CA

MINDWISE

August 2017 — June 2021

- Co-founded and helped lead a scrappy software development team of just 4 engineers, building a threat intelligence platform for the financial industry from the ground up.
- Initial focus was on providing real-time data pertaining to cardholders whose information had been compromised (seen on darknet), allowing for immediate mitigation and fraud-prevention.
- Integrated our scraping pipeline with LexisNexis to allow for confident matching of partial cardholder information to individuals.
- Leveraged huge scraped datasets from the darknet to identify the initial POC (Point of Compromise).
- Extended the platform to provide threat-monitoring capabilities for merchants, payment gateways, and businesses, allowing for real-time monitoring and remeditation wherever possible.
- In conjunction with the United States Postal Service Cybercrime Unit, developed a comprehensive dataset of vendors on illicit marketplaces shipping products through the postal service, and created a triangulation strategy based on shipping data to narrow down locations to place law enforcement assets.

- Delivered compromised client information detected by the platform for Golden 1 Credit Union, preventing potential losses due to fraudulent activity.
- Featured on Krebs on Security for my work identifying the initial POC (Point of Compromise) connected to a number of high-profile data breach: https://krebsonsecurity.com/2017/12/4-years-after-target-the-little-guy-is-the-target/

Senior Scraping Engineer

Remote

AUTOMATIO

July 2021 — June 2024

- Engineered and maintained a resilient scraping and automation backend serving the expansive ticketing sector as a core team member.
- Developed **innovative techniques** to circumvent increasingly sophisticated bot detection systems deployed by industry leaders including Ticketmaster, Seatgeek, and AXS among others.
- Single-handedly led the transition of the scraping infrastructure from static EC2 instances to a highly modular, autoscaling network of AWS Fargate services, allowing for quick releases and a more cost-effective solution that scaled according to demand for particular processes.
- Created and operated the system that ingested millions of tickets across millions of accounts across the major ticket retailers on a daily basis.
- Increased operational efficiency and cost-effectiveness by caching certain select resources and significantly improved system reliability through a set of safeguards and monitoring tools, built on top of AWS Cloudwatch and Datadog.
- Delivered solutions that consistently exceeded performance expectations and generated measurable business impact.
- Contributed to establishing the company's position the industry leader in the competitive ticket resale space.



SOLO PROJECT

https://www.instructables.com/Scientific-Research-High-Altitude-Balloon-for-Fun-/

High Altitude Scientific Research Balloon

June 2015

- Designed and built onboard sensors including temperature, pressure, radiation across alpha, beta, and gamma spectra, and telemetry systems and a GoPro camera for a high-altitude balloon that reached 100,000 feet.
- Wrote extensive documentation and published it on Instructables, where it won 1st place in the Explore Science Contest.

Playwright Humanize: Humanization functions for Playwright

nicoandmee/playwright-humanize

DEVELOPER

- Created a set of humanization functions for Playwright, allowing for more natural and human-like interactions with web applications.
- This included making use of Bezier curves to generate more natural and human-like interactions with the mouse, keyboard, and other input devices.
- Wrote detailed documentation and unit tests for the library and published it on Github. Next version will include a typing model based on actual human sampling
 - 1. machine learning to produce more realistic typing.

smspva-client: A client for the smspva.com API

nicoandmee/smspva-client

DEVELOPER

- Created a Javascript client for the smspva.com API, allowing for bots and other applications to send and receive verification codes seamlessly from the cloud.
- This became a personal project that I built to help me with my own workflow, but since nothing like this exists, I decided to publish it on Github.

SMSVerifNow: A better tool for SMS automation

www verifnow

DEVELOPER

- Wrote a better tool for SMS automation, SMSVerifNow, that works over JSON-RPC and is written in Typescript, making it more robust, flexible, and easier to use.
- Use case: automated systems, scripts, bots and the like that need to circumvent SMS number verification.
- I also decided to publish it on NPM, making it available to the public.

Skills

Programming Typescript, Javascript, Python, C++, C#, Haskell, Java, HTML, CSS, SQL, NoSQL

Languages

Software Event-Driven, Serverless, Monorepo, REST, gRPC, MVC

Architectures

Education _____

University of California, Los Angeles

Los Angeles, CA

B.S. IN COMPUTER SCIENCE (WIP)

August 2014 - May 2019

- Incomplete B.S. in Computer Science-I left the program after my first year to pursue other interests that at the time were more salient.
- I did, however, take a number of courses that were relevant to my current interests, including:
 - Computer Architecture
 - Operating Systems
 - Computer Networks
 - Computer Security
 - Computer Graphics
 - Computer Vision
 - Machine Learning

Utah Tech University

St. George, UT

B.S. IN COMPUTER SCIENCE (COMPLETED $\sqrt{}$)

August 2022 - May 2024

- Completed B.S. in Computer Science at Utah Tech University in two years while maintaining full-time employment as a software engineer at Automatiq, demonstrating my ability to juggle competing priorities effectively.
- I particuarly enjoyed the courses on Computer Architecture and Operating Systems, which were based on building a basic unix system from scratch, giving me an even deeper understanding of what goes on under the hood.

Certifications

Google Cloud Certified Solutions Architect	2024
CompTIA Security+	2025
CompTIA Networks+	2019
Comp TIA A+	2015
Assessed a O. Danas and Millians	

Awards & Recognition _____

MIT's Promise of the Future Award, Mission College Prep, 9th Grade

2012

1st Place in Instructables Explore Science Contest, Instructables Explore Science Contest (High Altitude Balloon) 2015

REFERENCES

Charles Tendell | CEO Azorian Cyber Security Denver, CO charles@azorian.io Jean Paquet | CTO
Gaine Solutions, Inc.
San Luis Obispo, CA
jean@gainesolutions.com
(+1) 805-748-1179

Dr. Thomas Svitek | CTO

Stellar Exploration San Luis Obispo, CA thomas@stellarexploration.com (+1) 801-459-1425