BERNÁT GÁBOR

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SUMMARY

Bernát (first name) Gábor (surname) is a senior software engineer who believes in polyglot programming (though lately heavily focuses on Python). Currently working full time in London at Bloomberg. He focuses on adding a quality control layer on the data ingestion pipeline built on top of a microservice framework. He finished his master studies in 2013 with outstanding results in the domain of computer science.

He is a regular Python conference speaker, and authored/maintains many high-profile Python libraries and tools. He is primaraly focused on packaging and testing (virtualenv, tox, pipx, flit, build). He is also a conscientious, self-driven learner and performer, having written multiple successful technical articles on his blog.

EXPERIENCE

Open Source *2015–present*
Open source software developer *London, United Kingdom*

Authored and maintains 20+ Python open source libraries or tools; for a list of high-profile examples see https://bernat.tech/about. Maintainer of the virtualenv package since 2018. Rewrote and re-released it with success in 2020. Maintainer of the tox tool since 2017 and close to finishing a rewrite of it. Other high-profile projects he maintains/authored: pipx, build, filelock, platformdirs, flit. Regular speaker at the EuroPython and PyCon US conferences (list of recordings at https://bernat.tech/presentations). Held a workshop about Python packaging at PyCon US 2021.

Received the Python Software Foundation Fellow distinction in 2021 Q3 for outstanding contributions to the Python ecosystem. Technical reviewer for the book "Python Object-Oriented Programming 4th edition" by Steven Lott and Dusty Phillips. Wrote two blog-post series that made number one on Hackerranks (python type hints and packaging).

Bloomberg *2016 April–present*
Senior Software Engineer *London, United Kingdom*

Works on the Data Technology department's quality control team. Responsible for designing and implementing a Python library/framework that allows financial analysts with limited computer-science knowledge (think simple Python scripting) to express heuristic rules (ones we can describe - type, range, relations etc.) and semi-automatic rules (i.e. using historical values with statistical models). The system runs over a microservice framework (think Amazon Lambda) and automatically collects and tracks metadata in the background which allows answering provenance and data ingestion questions (e.g. what rule checked this field, how often is this rule broken, validation coverage and efficacy of the pipeline).

Designs and implements a system that calculates metrics about the quality of the data ingestion pipeline and the dataset itself. Works with other teams to come up with schemas for information to track and then on adoption of those by various systems in the pipeline. Gives presentations at internal meetups and holds workshops about how to use the quality check system.

Member of the Python Guild Chairs: a group of around 10 engineers fostering the usage and best-practices of the Python language within the company. Chaired the conference working group since 2018. Maintainer of many high-profile internal tools: one that automatically generates type information from schemas, HTTP client against a proprietary protocol, Python abstraction over a service that allows access of securities, Jenkins CI pipeline library etcetera.

Gravity Research & Development *2011 September–2016 March*
Software and Integration Engineer *Budapest, Hungary*

The company provides hundreds of millions recommendation on a Software–as–a–Service platform on a daily basis to clients such as dailymotion.com, livejasmin.com, allegro.pl, edigital.hu etcetera. Analyzing customer systems; planning, designing and implementing the integration of them with the recommendation platform. Performing various AB tests and improvements after the integration to achieve optimal results, and maximize customer satisfaction. Continuously keep in touch with customers for fast and accurate feedback on current satisfaction and requirements.

Planning and implementing various internal systems to help with the integration flow and customer experience (bash shell & python scripts, PHP & JavaScript based reporting web page). Programming and maintaining a recommendation engine demo application (.NET & Silverlight). Transforming the old and hard-to-modify Ant build system to Gradle. Extending the core system with various new features. Participating in various conferences to keep up to date with industry trends. Taking part in the hiring process for new integration engineers, training them and functioning as mentor to them.

OpenCV (Open Source Computer Vision Library) *2011 May–August*
Technical writer and programmer (part of Google Summer of Code 2011) *Târgu Mureş, Romania*

Learned and used the reStructuredText documentation system to create various tutorials for the OpenCV library in both HTML and PDF output format. Helping to architect and create the system used for the documentation, as well co-supervisoring another person on the project. You can view the end result here: *http://docs.opencv.org/doc/tutorials/tutorials.html*.

EDUCATION

Budapest University of Technology and Economics, Hungary. *2011 September–2013 June*
Master's degree in Engineering Information Technologist.

Major in *applied informatics* (grade 4.57/5 – excellent). Thesis: "Analysis of data mining and recommendation services: open source solutions on a scalable framework", `http://goo.gl/0FICGX`.

Sapientia – Hungarian University of Transylvania, Romania. *2007 September–2011 June*
Bachelor's degree in Computer Science (grade 9.70/10).

Thesis: "Regional segmentation of images with B–Spline level set models", `http://goo.gl/fCigX6`.

TECHNICAL STRENGTHS

Computer languages	C/C++, C#, *Java*, Groovy, *Python*, Bash, JavaScript, TypeScript, CSS, HTML, LaTex, reStructuredText, PHP
Protocols and apis	XML, JSON, REST, BAS, jQuery, Qt, SqlAlchemy, JsonRpc, ggplot
Databases	comdb2, MySQL (Percona), basic of Cassandra, Hadoop (Hive), Redis
Tools	git, vim, tmux, Gradle, Arch Linux, Eclipse, Netbeans, Intellij IDEA, Visual Studio Code, Maven, Gradle, Jupyter, tox, JIRA, Confluence