The drop was swift: Prices for bitcoin and dozens of other digital currencies on Jan. 8 fell sharply, lopping more than $100 billion off their collective market value.

The globe-rattling move can be traced to one address: An apartment in a new residential building across the street from a local union headquarters in a gentrifying section of Long Island City, Queens.

It is the workplace of Brandon Chez, the 31-year-old computer programmer behind coinmarketcap.com, a website that is a top source for data on bitcoin and hundreds of other cryptocurrencies. Mr. Chez's site, which went live in 2013, has become one of the most heavily trafficked websites in the world.

Competition is heating up. On Thursday, Intercontinental Exchange Inc., the owner of the New York Stock Exchange, announced a partnership to launch a bitcoin data feed for Wall Street banks and traders. Independent sites including Onchainfx.com have also popped up.

Meanwhile, Mr. Chez's site is wielding unexpected impact. On January 7, coinmarketcap.com decided to remove trading activity from South Korean exchanges from its price-quote algorithms. The reason: prices there were significantly and persistently higher than in other countries. To some, it seemed the Korean trades were artificially inflating the price of bitcoin.
Without the South Korean bids and offers embedded in the CoinMarketCap listings, prices on the site fell precipitously. The price of the cryptocurrency XRP, for example, went from about $3.40 to $2.60 in one sharp move.

Yet little is known about how the site operates. Because Mr. Chez initially didn’t communicate the change, few if any outside the site knew why it was happening. Traders tried to help each other on message boards like Reddit and social media. Many were angry.

“This decision is really head scratching and irresponsible,” said a user on Reddit with the name “vilnius2013.”

In a Jan. 10 email exchange with The Wall Street Journal, Mr. Chez explained that coinmarketcap.com decided to make the change in its price algorithm on the evening of Sunday Jan. 7, though it remains unclear specifically when it went into effect.

By Monday morning, prices on his website for bitcoin, Ethereum, Ripple Inc.’s XRP, and dozens of other cryptocurrencies suddenly were being quoted materially lower, sometimes 15% or more.

At the time, some pointed to the South Korean move to inspect large commercial banks in the country on their use of cryptocurrencies.

Then, that Monday afternoon in New York, CoinMarketCap released a statement on Twitter that it “excluded some Korean exchanges in price calculations due to the extreme divergence in prices from the rest of the world and limited arbitrage opportunity.”

Mr. Chez wrote in his email to the Journal that “a lot of users were complaining about the inaccurate prices,” but he “didn’t realize how big of an impact” the Korean exclusion would have.

“I think the market was already on a downturn at that point so the timing was quite unfortunate,” he added.

The site “caused the market to crash,” Mati Greenspan, an analyst at brokerage firm eToro, wrote in a client note. “For myself and all of you reading, I propose that we boycott this website effective immediately.”

So far, that message has been ignored. On Monday, coinmarketcap.com was ranked 117th globally by Amazon’s website-ranking service, up from 142nd before the Korea decision.

Coinmarketcap.com also ranked higher than most U.S. news websites, and even Alibaba.com, a major Chinese retailer site that was ranked 174th globally.

That is quite a feat for a company that doesn’t have a corporate office, nor any clear outlet to the outside world save for a Twitter and Facebook account. The website doesn’t disclose any company officials, nor does it provide any contact beyond a general support email.

Part of the reason Mr. Chez’s site is surging in popularity comes from the mad rally over the past year in cryptocurrencies beyond bitcoin, often called “alt coins.” Coinmarketcap.com lists prices for more than 1,100 of them, from Ethereum, the second most valuable to something called AppleCoin, which Monday had a market capitalization on the site of $23.

Mr. Chez, whose name has been listed in public records databases as owner of the company, said in an email that “our goal was and still is to remain a neutral and accurate source for the cryptocurrency community.” CoinMarketCap is registered in New York as a limited liability company, with an address in Long Island City, according to the databases.

On that location sits a seven-story, brown-brick apartment building that was built within the last two years. Mr. Chez is listed as a resident there. The same address is also listed on public records linked to CoinMarketCap. Earlier this month, a person inside the apartment didn’t answer the door, and Mr. Chez declined to be interviewed.

Bitcoin, the leading cryptocurrency, was created in 2009 as a software program designed to run across a network of computers, but without any central authority. As it grew, exchanges were
formed online that brought together buyers and sellers. Because all those exchanges operate independently, prices can vary widely.

Coinmarketcap.com takes all that information and produces one standard price quote, making it easier to track data across different exchanges.

It generally avoids news stories and analysis. Instead, the site focuses on data, tallying the overall market value of all cryptocurrencies and publishing the percentage of the market made up by bitcoin.

After receiving a bachelor’s degree in computer science from Rochester Institute of Technology in 2009, Mr. Chez worked at Lockheed Martin and Mediabistro, which runs a website for journalists, according to an earlier version of his LinkedIn profile, which has since been altered. The same year that he started coinmarketcap.com, he took a job as a software engineer at Rocketrip, which helps companies manage business expenses. He left that job in 2015. Mediabistro confirmed his employment; Lockheed and Rocketrip didn’t respond.

CoinMarketCap appears to make money by selling display advertising through Alphabet Inc.’s Google. A form through which potential advertisers can sign up says there is a “$20,000 minimum order” for campaigns.

—Lisa Schwartz contributed to this article.

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