Many communities dream of becoming the next Silicon Valley. This one is actually doing it.

Stroll through the hip Fremont District and you will sense the Valley vibe. Google recently opened a research lab here, its second in Microsoft’s backyard. Technology start-ups are sprouting up amid quirky neighborhood landmarks like a bronze statue of Lenin and the Fremont Troll, the giant concrete creature lurking beneath the George Washington Memorial Bridge.

More young companies are moving in downtown, near the art galleries and bookstores around Pioneer Square. Still others are spreading into the surrounding suburbs.

“The Seattle start-up ecosystem is vibrant, and growing rapidly,” said Oren Etzioni, an artificial-intelligence expert at the University of Washington and a serial technology entrepreneur.
The University of Washington, in fact, is one of the big draws. It is fostering the entrepreneurial climate here the way Stanford University does in Silicon Valley. Another advantage is the tech-savvy talent at the Seattle-based Amazon and nearby Microsoft.

Microsoft offshoots, sometimes called Baby Bills, after Bill Gates of Microsoft, are being joined by Amazon progeny called Baby Jeffs, for Amazon’s Jeffrey P. Bezos. Baby Sergeys — those formed by veterans of Google, which is based in Mountain View, Calif., and was co-founded by Sergey Brin — are opening here, too, Mr. Etzioni said.

The influx of entrepreneurs and of venture capitalists to bankroll them is slowly reshaping this city and a regional economy long buffeted by the booms and busts of the aerospace and timber industries. A start-up ecosystem needs social networks, support businesses and a business culture that views failure as a badge of honor, not shame. All of that is in place in Seattle.

Tom A. Alberg, a partner at the Madrona Venture Group, one of Seattle’s leading venture capital firms and an early investor in Amazon, says the city is now home to a growing community of technology innovators who are willing to take risks.

“People were more risk-averse in the ’80s,” said Mr. Alberg, who is on the board at Amazon. Madrona lost money on HomeGrocer, the Seattle-based online grocery service, he said, “but if you never invest in a HomeGrocer, you will never invest in an Amazon.”

Money is pouring in. During the last 12 years, venture capital investment here has more than tripled, to about $1 billion annually. Last year Washington tied with Texas as the third-largest destination for venture capital money nationwide, behind California and Massachusetts.

A crucial part of the chemistry is the University of Washington, in particular its computer science and electrical engineering departments. Washington State ranks first nationally in engineers employed for every 10,000 workers and in percent of total payroll in high technology. And then there are Amazon, Microsoft and their offspring.

“Now tons of companies are spinning off people,” said Ed Lazowska, a computer scientist who holds the Bill and Melinda Gates Chair at the University of Washington. Veterans from Amazon, Microsoft, RealNetworks and other established companies are leaving to form start-ups and venture funds, he said. “We’re finally at the stage of becoming a perpetual-motion machine.”

Several generations of start-ups are beginning to cross-fertilize, fostering the kind of rapid growth seen in biological systems, said Mr. Etzioni, whose latest venture, Farecast, uses data-mining techniques to anticipate fluctuations in airfares.

One example of the growing start-up economy is Jackson Fish Market, a Web software company founded by three veteran Microsoft software designers. Inside a windowless...
loft in Pioneer Square, the company is now working on starting its third advertising-supported Web service.

The start-up culture “is beginning to work now,” said Walter Smith, one of Jackson’s founders, who worked on Microsoft’s Vista operating system but left before it was introduced. “Seattle is like an adolescent version of Silicon Valley.”

Mr. Etzioni says Seattle has at least one advantage over its storied counterpart in California. “People aren’t distracted by too much sunshine,“ he said. “They sit in their offices or garages and get creative.”