

TABLE CET-7

Companies performing or funding autonomous systems and robotics technology R&D, by industry: 2021

(Number and percent)

Industry	NAICS code	Companies (number)	Autonomous systems and robotics			
			Number		Percent	
			Yes	No	Yes	No
All industries	11, 21–23, 31–33, 42–81	4,874,928	25,839	4,849,089	0.5	99.5
Manufacturing industries	31–33	209,282	5,058	204,224	2.4	97.6
Food	311	19,326	210	19,116	1.1	98.9
Beverage and tobacco products	312	9,354	18	9,336	0.2	99.8
Textile, apparel, and leather products	313–16	9,443	36	9,407	0.4	99.6
Wood products	321	9,546	182	9,364	1.9	98.1
Paper	322	1,500	23	1,477	1.6	98.4
Printing and related support activities	323	20,212	46	20,166	0.2	99.8
Petroleum and coal products	324	546	8	538	1.4	98.6
Chemicals	325	7,961	189	7,772	2.4	97.6
Pesticide, fertilizer, and other agricultural chemicals	3253	580	7	573	1.2	98.8
Pharmaceuticals and medicines	3254	1,536	15	1,521	1.0	r 99.0
Soap, cleaning compound, and toilet preparation	3256	1,652	51	1,601	3.1	r 96.9
Other chemicals	other 325	4,194	119	4,075	2.8	97.2
Plastics and rubber products	326	7,060	344	6,716	4.9	95.1
Nonmetallic mineral products	327	7,290	87	7,203	1.2	98.8
Primary metals	331	2,079	142	1,937	6.8	93.2
Fabricated metal products	332	46,128	1,369	44,759	3.0	97.0
Machinery	333	16,440	1,042	15,398	6.3	93.7
Computer and electronic products	334	8,527	489	8,038	5.7	94.3
Communications equipment	3342	850	71	779	8.4	r 91.6
Semiconductor and other electronic components	3344	2,711	178	2,533	6.6	93.4
Navigational, measuring, electromedical, and control instruments	3345	3,737	201	3,536	5.4	94.6
Other computer and electronic products	other 334	1,230	37	1,193	3.0	r 97.0
Electrical equipment, appliances, and components	335	3,925	140	3,785	3.6	96.4
Transportation equipment	336	7,325	354	6,971	4.8	95.2
Automobiles, bodies, trailers, and parts	3361–63	4,494	234	4,260	5.2	94.8
Aerospace products and parts	3364	1,044	62	982	6.0	94.0
Other transportation	other 336	1,787	58	1,729	3.2	96.8
Furniture and related products	337	12,060	75	11,985	0.6	99.4
Miscellaneous	339	20,536	294	20,242	1.4	98.6
Medical equipment and supplies	3391	7,602	118	7,484	1.6	98.4
Other miscellaneous manufacturing	3399	12,933	177	12,756	1.4	98.6
Nonmanufacturing industries	11, 21–23, 42–81	4,665,645	20,787	4,644,858	0.4	99.6
Agriculture, forestry, fishing, and hunting	11	19,567	107	19,460	0.5	r 99.5
Mining, extraction, and support activities	21	14,004	18	13,986	0.1	99.9
Utilities	22	2,994	8	2,986	0.3	99.7
Construction	23	635,568	1,433	634,135	0.2	99.8
Wholesale trade	42	241,440	1,633	239,807	0.7	99.3
Retail trade	44–45	546,067	2,090	543,977	0.4	99.6
Transportation and warehousing	48–49	165,454	496	164,958	0.3	99.7
Information	51	65,445	447	64,998	0.7	99.3
Publishing	511	17,755	141	17,614	0.8	99.2
Newspaper, periodical, book, and directory publishers	5111	9,162	8	9,154	0.1	99.9
Software publishers	5112	8,589	132	8,457	1.5	98.5
Telecommunications	517	7,319	91	7,228	1.2	r 98.8
Data processing, hosting, and related services	518	8,346	146	8,200	1.8	98.2

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Other information	other 51	32,027	69	r	31,958	0.2	r	99.8
Finance and insurance	52	198,128	576		197,552	0.3		99.7
Real estate and rental and leasing	53	283,276	531		282,745	0.2		99.8
Lessors of nonfinancial intangible assets (except copyrighted works)	533	1,956	0		1,956	0.0		100.0
Other real estate and rental and leasing	other 53	281,321	531		280,790	0.2		99.8
Professional, scientific, and technical services	54	717,229	6,930		710,299	1.0		99.0
Legal services	5411	152,543	281		152,262	0.2		99.8
Accounting, tax preparation, bookkeeping, and payroll services	5412	109,075	237	r	108,838	0.2	r	99.8
Architectural, engineering, and related services	5413	87,994	2,136		85,858	2.4		97.6
Specialized design services	5414	29,258	11		29,247	0.0		100.0
Computer systems design and related services	5415	100,282	2,114		98,168	2.1		97.9
Management, scientific, and technical consulting services	5416	144,421	1,428		142,993	1.0		99.0
Scientific research and development services	5417	11,149	520		10,629	4.7		95.3
Advertising, public relations, and related services	5418	28,236	110	r	28,126	0.4	r	99.6
Other professional, scientific, and technical services	5419	54,270	88	r	54,182	0.2	r	99.8
Management of companies and enterprises	55	3,153	72	r	3,081	2.3	r	97.7
Administrative and support and waste management and remediation services	56	293,539	888		292,651	0.3		99.7
Educational services	61	57,078	156		56,922	0.3	r	99.7
Health care and social assistance	62	536,276	1,892		534,384	0.4		99.6
Health care services	621-23	469,939	1,653		468,286	0.4		99.6
Social assistance	624	66,336	239		66,097	0.4		99.6
Arts, entertainment, and recreation	71	89,491	133	r	89,358	0.1	r	99.9
Accommodation and food services	72	455,071	1,970		453,101	0.4		99.6
Other services	81	341,869	1,345		340,524	0.4		99.6

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail across rows may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Detail across columns have been adjusted to add to total. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2022 Annual Business Survey: Data Year 2021.