

Productline Predict and Visualization Importance

Work Report - 苏泽

November 25, 2022

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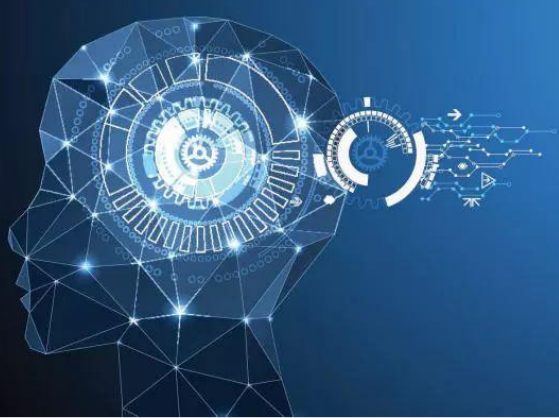
SBA.

SCHOOL OF INFORMATION SCIENCE & TECHNOLOGY,
LINYI UNIVERSITY

SOFTWARE DEVELOPMENT,
BIG DATA,
ARTIFICIAL INTELLIGENCE



明義 銳思 弘毅 致遠
Deep Righteousness Sharp Ideology Strong Will Lofty Ambitions



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4 datasets

- Merchant fleet by flag of registration and by type of ship
- Merchant fleet by country of beneficial ownership
- Ships built by country of building
- Ship scrapping by country of demolition





01 - Data

US_ShipScrapping_ST202010121509_v1.csv

Year	Series	Series Label	Country	Country Label	ShipType	ShipType Label	Percentage of total all economies	Percentage of total all economies Footnote	Gross Tonnage	Gross Tonnage Footnote
2017	2307	Ship scrapping by country of destruction	0000	World	0	Total fleet	100		23137868	
2017	2307	Ship scrapping by country of destruction	0000u	World n.e.s.	0	Total fleet	0.55387		128154	
2017	2307	Ship scrapping by country of destruction	031	Azerbaijan	0	Total fleet	0.00321		742	
2017	2307	Ship scrapping by country of destruction	036	Australia	0	Total fleet	0		0	
2017	2307	Ship scrapping by country of destruction	050	Bangladesh	0	Total fleet	28.92787		6693292	
2017	2307	Ship scrapping by country of destruction	056	Belgium	0	Total fleet	0.05312		12291	
2017	2307	Ship scrapping by country of destruction	076	Brazil	0	Total fleet	0.01728		3999	
2017	2307	Ship scrapping by country of destruction	1100	Developed economies	0	Total fleet	0.81649		188919	
2017	2307	Ship scrapping by country of destruction	1120	Developed economies: America	0	Total fleet	0.505		116847	
2017	2307	Ship scrapping by country of destruction	1130	Developed economies: Asia	0	Total fleet	0.00324		749	
2017	2307	Ship scrapping by country of destruction	1140	Developed economies: Europe	0	Total fleet	0.30825		71323	
2017	2307	Ship scrapping by country of destruction	1150	Developed economies: Oceania	0	Total fleet	0		0	
2017	2307	Ship scrapping by country of destruction	1200	Developing economies	0	Total fleet	98.6118		22816667	
2017	2307	Ship scrapping by country of destruction	1210	Developing economies: Africa	0	Total fleet	0.12985		30044	
2017	2307	Ship scrapping by country of destruction	1220	Developing economies: America	0	Total fleet	0.1218		28183	
2017	2307	Ship scrapping by country of destruction	1230	Developing economies: Asia	0	Total fleet	98.36014		22758440	
2017	2307	Ship scrapping by country of destruction	124	Canada	0	Total fleet	0.0999		23114	
2017	2307	Ship scrapping by country of destruction	1300	Transition economies	0	Total fleet	0.01784		4128	
2017	2307	Ship scrapping by country of destruction	156	China	0	Total fleet	16.32307		3776811	
2017	2307	Ship scrapping by country of destruction	192	Cuba	0	Total fleet	0.04927		11401	
2017	2307	Ship scrapping by country of destruction	208	Denmark	0	Total fleet	0.12311		28486	
2017	2307	Ship scrapping by country of destruction	2101	Developed economies: Asia and Oceania	0	Total fleet	0.00324		749	
2017	2307	Ship scrapping by country of destruction	2102	Developing economies: Asia and Oceania	0	Total fleet	98.36014		22758440	
2017	2307	Ship scrapping by country of destruction	2116	Sub-Saharan Africa excluding South Africa	0	Total fleet	0.12985		30044	





01 - Data

US_ShipBuilding_ST202010131356_v1.csv

Year	Series	Series Label	Country	Country Label	ShipType	ShipType Label	Percentage of total all economies	Percentage of total all economies Footnote	Gross Tonnage	Gross Tonnage Footnote
2014	2306	Ship building by country of built	0000	World	0	Total fleet	100		63662235	
2014	2306	Ship building by country of built	0000u	World n.e.s.	0	Total fleet	0.0134		8528	
2014	2306	Ship building by country of built	031	Azerbaijan	0	Total fleet	0		0	
2014	2306	Ship building by country of built	032	Argentina	0	Total fleet	0		0	
2014	2306	Ship building by country of built	036	Australia	0	Total fleet	0.00353		2245	
2014	2306	Ship building by country of built	040	Austria	0	Total fleet	0		0	
2014	2306	Ship building by country of built	048	Bahrain	0	Total fleet	0		0	
2014	2306	Ship building by country of built	050	Bangladesh	0	Total fleet	0.02391		15220	
2014	2306	Ship building by country of built	076	Brazil	0	Total fleet	0.37339		237708	
2014	2306	Ship building by country of built	100	Bulgaria	0	Total fleet	0		0	
2014	2306	Ship building by country of built	104	Myanmar	0	Total fleet	0		0	
2014	2306	Ship building by country of built	1100	Developed economies	0	Total fleet	24.14203		15369357	
2014	2306	Ship building by country of built	1120	Developed economies: America	0	Total fleet	0.36352		231425	
2014	2306	Ship building by country of built	1130	Developed economies: Asia	0	Total fleet	21.03622		13392130	
2014	2306	Ship building by country of built	1140	Developed economies: Europe	0	Total fleet	2.73845		1743357	
2014	2306	Ship building by country of built	1150	Developed economies: Oceania	0	Total fleet	0.00384		2445	
2014	2306	Ship building by country of built	1200	Developing economies	0	Total fleet	75.77219		48238272	
2014	2306	Ship building by country of built	1210	Developing economies: Africa	0	Total fleet	0.00277		1763	
2014	2306	Ship building by country of built	1220	Developing economies: America	0	Total fleet	0.38346		244118	
2014	2306	Ship building by country of built	1230	Developing economies: Asia	0	Total fleet	75.38597		47992391	
2014	2306	Ship building by country of built	124	Canada	0	Total fleet	0.03034		19312	
2014	2306	Ship building by country of built	1300	Transition economies	0	Total fleet	0.07238		46078	
2014	2306	Ship building by country of built	144	Sri Lanka	0	Total fleet	0.01974		12566	
2014	2306	Ship building by country of built	152	Chile	0	Total fleet	0.00864		5500	
2014	2306	Ship building by country of built	156	China	0	Total fleet	35.8946		22851302	
2014	2306	Ship building by country of built	158	China, Taiwan Province of	0	Total fleet	0.90196		574208	
2014	2306	Ship building by country of built	161	Croatia	0	Total fleet	0.0592		37687	





01 - Data

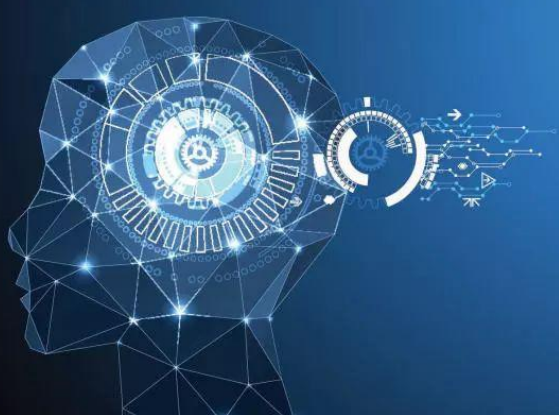
US_MerchantFleet_ST202010011334_v4.csv														
Year	Economy	Economy Label	ShipType	ShipType Label	Dead weight tons in thousands	Dead weight tons in thousands Footnote	Percentage of total world	Percentage of total world Footnote	Percentage of total fleet	Percentage of total fleet Footnote	Number of ships	Number of ships Footnote	Gross Tonnage in thousands	Gross Tonnage in thousands Footnote
1980	0000	World	0	Total fleet	672142.488		100		100					
1980	0000	World	1	Oil tankers	337895.557		100		50.27142					
1980	0000	World	2	Bulk carriers	181880.282		100		27.05978					
1980	0000	World	3	General cargo	112840.897		100		16.78824					
1980	0000	World	4	Container ships	10290.114		100		1.53094					
1980	0000	World	5	Other types of ships	29235.638		100		4.34962					
1980	008	Albania	0	Total fleet	78.949		0.011746		100					
1980	008	Albania	3	General cargo	78.949		0.069965		100					
1980	012	Algeria	0	Total fleet	1872.119		0.27853		100					
1980	012	Algeria	1	Oil tankers	1177.697		0.348539		62.90717					
1980	012	Algeria	2	Bulk carriers	127.91		0.070326		6.83236					
1980	012	Algeria	3	General cargo	305.782		0.270985		16.33347					
1980	012	Algeria	5	Other types of ships	260.73		0.891823		13.927					
1980	024	Angola	0	Total fleet	95.971		0.014278		100					
1980	024	Angola	1	Oil tankers	3		0.000888		3.12594					
1980	024	Angola	3	General cargo	91.932		0.08147		95.79144					
1980	024	Angola	5	Other types of ships	1.039		0.003554		1.08262					
1980	028	Antigua and Barbuda	0	Total fleet	0.25		3.7E-05		100					
1980	028	Antigua and Barbuda	3	General cargo	0.25		0.000222		100					
1980	032	Argentina	0	Total fleet	3371.761		0.501644		100					
1980	032	Argentina	1	Oil tankers	1200.44		0.35527		35.60276					
1980	032	Argentina	2	Bulk carriers	901.788		0.495814		26.74531					
1980	032	Argentina	3	General cargo	1118.641		0.991344		33.17676					
1980	032	Argentina	5	Other types of ships	150.892		0.516124		4.47517					
1980	036	Australia	0	Total fleet	2403.644		0.357609		100					
1980	036	Australia	1	Oil tankers	512.649		0.151718		21.32799					
1980	036	Australia	2	Bulk carriers	1400.984		0.770278		58.28584					
1980	036	Australia	3	General cargo	314.201		0.278446		13.07186					
1980	036	Australia	4	Container ships	91.806		0.892177		3.81945					
1980	036	Australia	5	Other types of ships	84.004		0.287334		3.49486					
1980	040	Austria	0	Total fleet	126.89		0.018878		100					
1980	040	Austria	2	Bulk carriers	62.824		0.034541		49.5106					
1980	040	Austria	3	General cargo	50.736		0.044962		39.98424					
1980	040	Austria	4	Container ships	13.33		0.129542		10.50516					
1980	044	Bahamas	0	Total fleet	165.05		0.024556		100					





01 - Data

US_FleetBeneficialOwners_ST202010231134_v2.csv										
Year	FlagOfRegistration	FlagOfRegistration Label	BeneficialOwnership	BeneficialOwnership Label	Dead weight tons in thousands	Dead weight tons in thousands Footnote	Percentage of total fleet	Percentage of total fleet Footnote	Number of ships	Number of ships Footnote
2014	0000	Total all flags	0000	World	1677345.179		100		47497	
2014	0000	Total all flags	0000u	World n.e.s.	5498.359		0.3278		624	
2014	0000	Total all flags	008	Albania	87.149		0.0052		22	
2014	0000	Total all flags	012	Algeria	1380.595		0.08231		45	
2014	0000	Total all flags	016	American Samoa	0		0		0	
2014	0000	Total all flags	024	Angola	5759.858		0.34339		54	
2014	0000	Total all flags	028	Antigua and Barbuda	0.584		3E-05		1	
2014	0000	Total all flags	031	Azerbaijan	674.992		0.04024		182	
2014	0000	Total all flags	032	Argentina	882.231		0.0526		64	
2014	0000	Total all flags	036	Australia	2508.535		0.14955		119	
2014	0000	Total all flags	040	Austria	274.135		0.01634		17	
2014	0000	Total all flags	044	Bahamas	1114.355		0.06644		39	
2014	0000	Total all flags	048	Bahrain	138.44		0.00825		27	
2014	0000	Total all flags	050	Bangladesh	2091.628		0.1247		89	
2014	0000	Total all flags	052	Barbados	2.04		0.00012		1	
2014	0000	Total all flags	056	Belgium	15229.33		0.90794		222	
2014	0000	Total all flags	060	Bermuda	37605.34		2.24196		277	
2014	0000	Total all flags	068	Bolivia (Plurinational State of)	1.741		0.0001		1	
2014	0000	Total all flags	076	Brazil	19182.62		1.14363		378	
2014	0000	Total all flags	084	Belize	21.354		0.00127		6	
2014	0000	Total all flags	090	Solomon Islands	0		0		0	
2014	0000	Total all flags	092	British Virgin Islands	332.253		0.01981		8	
2014	0000	Total all flags	096	Brunei Darussalam	19.241		0.00115		8	
2014	0000	Total all flags	100	Bulgaria	1274.534		0.07599		77	
2014	0000	Total all flags	104	Myanmar	173.134		0.01032		36	
2014	0000	Total all flags	1100	Developed economies	986660.509		58.82275		23224	
2014	0000	Total all flags	1120	Developed economies: America	103396.292		6.16428		2496	
2014	0000	Total all flags	1130	Developed economies: Asia	228433.464		13.61875		4016	
2014	0000	Total all flags	1140	Developed economies: Europe	652121.544		38.8782		16575	
2014	0000	Total all flags	1150	Developed economies: Oceania	2709.209		0.16152		137	
2014	0000	Total all flags	116	Cambodia	8.24		0.00049		2	
2014	0000	Total all flags	120	Cameroon	428.696		0.02556		3	
2014	0000	Total all flags	1200	Developing economies	661453.523		39.43455		21326	
2014	0000	Total all flags	1210	Developing economies: Africa	22509.138		1.34195		809	
2014	0000	Total all flags	1220	Developing economies: America	33141.101		1.97581		1154	
2014	0000	Total all flags	1230	Developing economies: Asia	605105.299		36.07518		19252	
2014	0000	Total all flags	124	Canada	10156.76		0.60553		357	



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临沂大学 - 信息科学与工程学院 - SBA研究组

Thanks for your attention!

谢谢!



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