| variable | viceDgBNm\_randomForestNode | viceNdgBNm\_randomForestNode | viceDgBNm\_randomForestAcc | viceNdgBNm\_randomForestAcc | viceNdgBNm\_xgboost | viceDgBNm\_xgboost |
| --- | --- | --- | --- | --- | --- | --- |
| departmentFixed.Chicago.Police.Department | 11.62233727 |  | 6.268527543 |  |  | 0.0778233273 |
| departmentFixed.Phoenix.Police.Department | 15.18131065 |  | 11.973516705 |  |  | 0.0589481516 |
| SubjectAge.U | 9.45507488 | 11.0129442 | 5.418060074 | 6.4640856 | 0.1060504868 | 0.0329034623 |
| SubjectGender.U | 5.65693234 | 7.1690552 | 3.206249130 | 4.1802447 | 0.0438651007 | 0.0287202165 |
| officerRaceW | 2.08680603 | 5.1140573 | 2.818138846 | 3.6340714 | 0.0433352532 | 0.0267980180 |
| SubjectArmed.U | 7.17134671 | 8.8707213 | 4.932112820 | 6.7651025 | 0.0505778242 | 0.0243907061 |
| officerGenderM | 1.66273306 | 3.2184939 | 1.861732745 | 1.1766183 | 0.0228830624 | 0.0229277067 |
| situation.call | 4.76811610 | 8.3464530 | 7.678528404 | 11.2426097 | 0.0653346565 | 0.0218579591 |
| fixedNrOfficers | 1.20005604 | 2.7820371 | 0.803651447 | 2.1290936 | 0.0140671186 | 0.0218319491 |
| Fatal.F | 3.30296433 | 9.7463826 | 1.786765455 | 5.1091398 | 0.0425966194 | 0.0208157852 |
| departmentFixed.Albuquerque.Police.Department | 2.75338908 |  | 6.687887024 |  |  | 0.0189168272 |
| departmentFixed.Portland.Police.Bureau | 2.80314664 |  | 6.027054521 |  |  | 0.0185506801 |
| SubjectArmed.N | 3.38797699 | 6.6573839 | 1.721315982 | 3.6216958 | 0.0547208411 | 0.0183225365 |
| SubjectGender.M | 3.33912437 | 4.3282517 | 3.643742135 | 6.0272761 | 0.0566867217 | 0.0179778750 |
| SubjectAge.40.49 | 2.61584513 | 6.4930922 | 4.641892521 | 8.2679683 | 0.0346112052 | 0.0178354732 |
| SubjectAge.50.59 | 2.70822035 | 9.4370024 | 5.802553255 | 11.4587005 | 0.0650644659 | 0.0175979544 |
| officerRaceB | 4.05983509 | 5.1136445 | 3.413047247 | 1.9717815 | 0.0579069771 | 0.0166874663 |
| situation.misc. | 5.37549503 | 12.4607334 | 5.902363332 | 9.9405838 | 0.0574537530 | 0.0163775259 |
| situation.suicide | 3.45019213 | 6.1246252 | 7.231352190 | 9.0437861 | 0.0493680024 | 0.0152637293 |
| SubjectAge.0.19 | 2.08734879 | 3.4915386 | 2.793779040 | 4.5117909 | 0.0534654623 | 0.0150305431 |
| departmentFixed.Tucson.Police.Department | 1.65597811 |  | 4.587820849 |  |  | 0.0142306927 |
| SubjectAge.20.29 | 0.98077779 | 1.2571483 | 2.038169879 | 2.7917981 | 0.0164704516 | 0.0135546178 |
| Fatal.N | 3.25690365 | 6.5861118 | 3.101343829 | 4.5557247 | 0.0366387379 | 0.0135402451 |
| SubjectAge.60. | 2.34370629 | 4.0957130 | 5.707633320 | 7.9955103 | 0.0354764379 | 0.0134853004 |
| departmentFixed.Houston.Police.Department | 0.85233864 |  | 1.403549336 |  |  | 0.0131135522 |
| year.2014 | 0.66670989 |  | -0.695524989 |  |  | 0.0129135978 |
| departmentFixed.San.Diego.Police.Department | 1.71933904 |  | 5.482553385 |  |  | 0.0113775062 |
| officerRaceL | 0.85966786 | 1.2574677 | -0.622369911 | -1.4312031 | 0.0066527836 | 0.0110796749 |
| departmentFixed.San.Jose.Police.Department | 1.23650208 |  | 3.862888841 |  |  | 0.0107689779 |
| officerGenderU | 1.25364929 | 1.4100388 | 2.556468911 | 2.3550838 | 0.0067782066 | 0.0103814749 |
| SubjectAge.30.39 | 1.99436650 | 1.5893322 | 3.533247954 | 3.5088348 | 0.0125476079 | 0.0103724346 |
| officerRaceU | 2.00329605 | 2.3658761 | 3.219227349 | 3.0086363 | 0.0115040482 | 0.0101745052 |
| day.23 | 0.69842224 |  | 1.524010167 |  |  | 0.0098187508 |
| departmentFixed.Austin.Police.Department | 0.90839675 |  | 3.643750770 |  |  | 0.0094904680 |
| year.2012 | 0.62875238 |  | 2.258333834 |  |  | 0.0094812572 |
| departmentFixed.El.Paso.Police.Department | 1.95120490 |  | 5.624842067 |  |  | 0.0093423779 |
| departmentFixed.Kansas.City.Police.Department | 0.70962370 |  | 2.180845087 |  |  | 0.0089699902 |
| SubjectArmed.Y | 0.88946192 | 1.8434182 | 2.173869353 | 2.3172173 | 0.0166591344 | 0.0089034457 |
| month.9 | 0.67649774 |  | 1.134973753 |  |  | 0.0088295553 |
| day.11 | 0.71891673 |  | 1.981858638 |  |  | 0.0085516368 |
| year.2016 | 0.59819838 |  | -0.002360446 |  |  | 0.0083726041 |
| departmentFixed.San.Antonio.Police.Department | 0.44066654 |  | 2.894645661 |  |  | 0.0083456794 |
| month.6 | 0.33713108 |  | 0.313998558 |  |  | 0.0077268542 |
| year.2013 | 0.29891656 |  | -1.913801209 |  |  | 0.0075535626 |
| month.12 | 0.42672065 |  | -1.105714624 |  |  | 0.0073503665 |
| month.2 | 0.42239331 |  | 0.133249320 |  |  | 0.0072441066 |
| SubjectGender.F | 0.83083985 | 2.4117304 | 3.566274344 | 5.7681591 | 0.0209361716 | 0.0071486179 |
| month.11 | 0.58786708 |  | 1.133393051 |  |  | 0.0068353157 |
| year.2015 | 0.45282830 |  | -0.785527473 |  |  | 0.0068208582 |
| situation.domesticViolence | 0.88247103 | 0.8315961 | 2.774192893 | 1.7376516 | 0.0062841336 | 0.0067860320 |
| Fatal.U | 0.40627297 | 0.5710555 | 0.088541211 | -0.1568892 | 0.0018644943 | 0.0067407407 |
| departmentFixed.Denver.Police.Department | 1.96615819 |  | 5.380266795 |  |  | 0.0063827925 |
| departmentFixed.DeKalb.County.Police.Department | 0.75831597 |  | 1.811805421 |  |  | 0.0061548368 |
| departmentFixed.Memphis.Police.Department | 0.45090139 |  | 2.361523575 |  |  | 0.0060682956 |
| departmentFixed.Fort.Worth.Police.Department | 0.99693685 |  | 3.740420036 |  |  | 0.0058061929 |
| departmentFixed.Dallas.Police.Department | 0.40977648 |  | 1.620223274 |  |  | 0.0057713089 |
| month.3 | 0.23946053 |  | -0.289648053 |  |  | 0.0056002294 |
| month.5 | 0.22194995 |  | 0.381665956 |  |  | 0.0055273168 |
| departmentFixed.New.York.Police.Department | 0.25551850 |  | -0.959526417 |  |  | 0.0053498805 |
| year.2011 | 0.53946605 |  | 2.288356878 |  |  | 0.0053455079 |
| departmentFixed.Los.Angeles.Police.Department | 0.45827996 |  | 2.265454450 |  |  | 0.0052581593 |
| day.26 | 0.30405763 |  | 1.624378440 |  |  | 0.0052090003 |
| month.7 | 0.34669327 |  | -0.792798894 |  |  | 0.0046846591 |
| month.8 | 0.25791127 |  | -1.791442395 |  |  | 0.0046228396 |
| departmentFixed.Jacksonville.Police.Department | 0.40206748 |  | 1.251965833 |  |  | 0.0044604187 |
| year.2010 | 0.39550953 |  | -0.426342664 |  |  | 0.0043856011 |
| departmentFixed.Columbus.Police.Department | 0.36390600 |  | -1.179944785 |  |  | 0.0042211603 |
| month.4 | 0.31479699 |  | 0.525801490 |  |  | 0.0040983317 |
| month.10 | 0.38803511 |  | -0.298276574 |  |  | 0.0040116243 |
| day.14 | 0.27010184 |  | 0.474911803 |  |  | 0.0038675685 |
| day.22 | 0.29643323 |  | 1.371278335 |  |  | 0.0038401722 |
| day.6 | 0.44656326 |  | 0.015157900 |  |  | 0.0038392837 |
| day.12 | 0.16967621 |  | -0.351727684 |  |  | 0.0038138430 |
| day.7 | 0.29058127 |  | 1.016243481 |  |  | 0.0037572505 |
| day.20 | 0.41577728 |  | -1.192402837 |  |  | 0.0036311034 |
| day.8 | 0.43517466 |  | 0.342305173 |  |  | 0.0034876959 |
| day.1 | 0.29166654 |  | -0.734751780 |  |  | 0.0034007231 |
| situation.crime | 0.42625456 | 0.8177864 | 0.386550446 | 2.5666034 | 0.0006378211 | 0.0032477547 |
| day.9 | 0.33983024 |  | -0.010672375 |  |  | 0.0031885730 |
| day.17 | 0.22918866 |  | 1.267690950 |  |  | 0.0031657781 |
| month.1 | 0.29412730 |  | -1.618332271 |  |  | 0.0030889455 |
| departmentFixed.Las.Vegas.Metropolitan.Police.Department | 0.51251241 |  | 2.230441841 |  |  | 0.0029903434 |
| departmentFixed.Miami.Dade.Police.Department | 0.33213841 |  | 1.603218533 |  |  | 0.0028957688 |
| situation.weapon | 0.18622209 | 0.5137566 | 0.959988026 | 0.8254516 | 0.0005847603 | 0.0028030322 |
| departmentFixed.Indianapolis.Metro.Police.Department | 0.13367097 |  | 1.566339953 |  |  | 0.0027031938 |
| situation.robbery | 0.28158830 | 0.6816208 | -2.040211464 | -0.2255678 | 0.0005825086 | 0.0026104615 |
| departmentFixed.New.Orleans.Police.Department | 0.68298712 |  | 3.388887221 |  |  | 0.0022861703 |
| day.21 | 0.29315641 |  | 0.824326580 |  |  | 0.0022553186 |
| day.5 | 0.18785207 |  | 1.025053342 |  |  | 0.0022331883 |
| day.15 | 0.20185417 |  | -1.085460927 |  |  | 0.0021625556 |
| day.28 | 0.28772327 |  | -0.549257577 |  |  | 0.0021142362 |
| day.27 | 0.17639259 |  | 1.833305743 |  |  | 0.0020222763 |
| day.24 | 0.17853306 |  | -0.794815310 |  |  | 0.0018996430 |
| situation.suspect | 0.34238134 | 0.7250692 | 1.864674901 | -0.4895757 | 0.0000000000 | 0.0017843160 |
| departmentFixed.St..Louis.Metro.Police.Department | 0.17111066 |  | 0.394771351 |  |  | 0.0017382925 |
| day.29 | 0.15409368 |  | -0.023231431 |  |  | 0.0017357446 |
| departmentFixed.Seattle.Police.Department | 0.16728171 |  | 1.541086543 |  |  | 0.0016278511 |
| day.10 | 0.14403599 |  | -0.549905520 |  |  | 0.0015716406 |
| day.2 | 0.39011550 |  | 0.008795945 |  |  | 0.0015667783 |
| departmentFixed.Milwaukee.Police.Department | 0.16484754 |  | 1.294975864 |  |  | 0.0014917222 |
| departmentFixed.City.of.Miami.Police.Department | 0.05607255 |  | 1.002509414 |  |  | 0.0014725388 |
| situation.traffic | 0.28546500 | 0.4543120 | 2.158952231 | 1.6640814 | 0.0000000000 | 0.0013528439 |
| situation.suspicious | 0.20110938 | 0.3085236 | -0.374929149 | 1.0516991 | 0.0000000000 | 0.0013079452 |
| officerRaceA | 0.21390906 | 0.5960926 | 1.568739468 | 0.8416690 | 0.0006156699 | 0.0012619814 |
| departmentFixed.Baltimore.Police.Department | 0.50802546 |  | 1.468645582 |  |  | 0.0012138331 |
| day.30 | 0.19034798 |  | 1.512367003 |  |  | 0.0010129966 |
| officerRaceO | 0.40496959 | 1.2123331 | -0.922583197 | 1.4091862 | 0.0058969238 | 0.0010009655 |
| day.16 | 0.16492274 |  | 1.546452615 |  |  | 0.0008908371 |
| departmentFixed.Louisville.Metro.Police.Department | 0.11456755 |  | -1.976935976 |  |  | 0.0008863341 |
| officerGenderF | 0.48597048 | 1.0661848 | -0.720265246 | -0.8189562 | 0.0012234881 | 0.0008635687 |
| day.25 | 0.21823200 |  | 0.186905970 |  |  | 0.0005697617 |
| day.18 | 0.13690945 |  | 0.831268096 |  |  | 0.0005601355 |
| departmentFixed.Metro.Nashville.Police.Department | 0.14738142 |  | 0.252542850 |  |  | 0.0005098880 |
| day.13 | 0.13803771 |  | -2.891423851 |  |  | 0.0005006526 |
| situation.drugs | 0.16346166 | 0.3057185 | -0.722790528 | 1.0384096 | 0.0000000000 | 0.0004883470 |
| day.4 | 0.13996196 |  | 1.224124382 |  |  | 0.0004679082 |
| departmentFixed.Prince.George.s.County.Police.Department | 0.40572239 |  | 1.510650238 |  |  | 0.0003712293 |
| day.3 | 0.14645388 |  | -0.527188984 |  |  | 0.0003468091 |
| departmentFixed.Tampa.Police.Department | 0.25843510 |  | 2.728015419 |  |  | 0.0002593512 |
| day.19 | 0.26637997 |  | 1.134696964 |  |  | 0.0000000000 |
| situation.offduty | 0.07539072 | 0.1368210 | 1.002509414 | -0.7796707 | 0.0000000000 | 0.0000000000 |
| situation.mentalhealth | 0.16131004 | 0.3556709 | -0.007916180 | 0.9141632 | 0.0000000000 | 0.0000000000 |
| situation.shooting | 0.13153019 | 0.3704765 | -0.220191416 | 0.3245607 | 0.0006590702 | 0.0000000000 |
| situation.stolenvehicle | 0.07049723 | 0.1295277 | -0.920236903 | -1.4307863 | 0.0000000000 | 0.0000000000 |
| day.31 | 0.08074286 |  | -0.811122538 |  |  | 0.0000000000 |
| departmentFixed.San.Francisco.Police.Department | 0.00791907 |  | -1.002509414 |  |  | 0.0000000000 |
| departmentFixed.Boston.Police.Department | 0.00000000 |  | 0.000000000 |  |  | 0.0000000000 |
| departmentFixed.Fairfax.County.Police.Department | 0.00000000 |  | 0.000000000 |  |  | 0.0000000000 |