**Experiment 1 (PSO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of SCFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 1 | -6432.42066999917 | -1350.95523679364 | 8.33736002893849 | 22.9847940127521 |  | 4 | -8929.81346176827 | 7973.73278502136 | -5.98466873208344 | -0.661927236201881 |
| 2 | -15.2876622607418 | 4591.05613105713 | -11.7561259253897 | 4.72443733068042 |  | 5 | 209.414309923082 | 8200.95439412282 | -7.46960910663974 | -1.52342936717163 |
| 3 | -786.681976108377 | 1580.06313065085 | -3.75565284268456 | -13.9418157331042 |  | 6 | 11193.6000696370 | 3685.77059682655 | -13.2438338272553 | 14.9293828471471 |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 7 | -3889.10762897970 | -3293.78860462164 | -14.0077622128504 | -2.12909278484275 |  | 10 | 2403.08781485349 | 888.858942915731 | -4.76572408620644 | 7.43143491117684 |
| 8 | 0.360865414195305 | -302.945603259397 | -6.05550697596177 | -17.3061401758192 |  | 11 | -9.63734670796344 | 7715.24358947782 | -18.9461372046782 | -2.79895745282381 |
| 9 | 14904.5147966460 | 6260.92649462080 | -2.98844319779479 | -2.13056271888439 |  | 12 | 4967.21577392416 | -1086.24084080263 | -11.5895846027932 | 8.14874385295296 |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.139885081330342 + 0.0569549116772951i |  | 0.0329431334061625 + 0.00966873186365472i |  | 0.239640922759669 - 0.204023744750069i |
| 2 |  | -0.133500705940714 - 0.0597542653133973i |  | -0.127212653519448 - 0.00628390194326085i |  | 0.00435038369202469 + 0.102762169099334i |
| 3 |  | 0.266998581977062 + 0.00127335580497023i |  | -0.0597623775153426 + 0.0490005235050833i |  | -0.0151427614801734 - 0.00125510746345797i |
| 4 |  | -0.0987293943524347 - 0.426846723547755i |  | 0.216780631134682 - 0.116718273681574i |  | 0.204518928283570 + 0.253321759299709i |
| 5 |  | 0.0721077093531184 - 0.108251723936995i |  | -0.0384749804793504 - 0.453087099321425i |  | -0.108327347217055 - 0.440175085508834i |
| 6 |  | -15.8168228081633 + 13.6576470448282i |  | 0.0392071989096507 - 0.00746494560555725i |  | 0.0320966380492307 - 0.152345274094130i |
| 7 |  | -0.0144652699645843 - 0.00118471948923809i |  | 0.0130145428815505 + 0.00231875349541334i |  | -0.116141014954156 + 0.214008479192069i |
| 8 |  | -0.0127766689632849 + 0.0376677058327341i |  | -0.0946125854725524 + 0.0201104615067859i |  | -0.0624310298311906 - 0.00274013168177092i |
| 9 |  | 0.0227316983457450 + 0.0212257359153846i |  | -0.181287363256386 - 0.232610139263671i |  | -0.0144376312250260 - 0.109213080878465i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.215306445600237 + 0.352955470836732i |  | -0.0698327542337802 - 0.268835810171504i |  |  |
| 2 |  | 0.289250367897171 + 0.644246929072400i |  | -0.0112873649091043 - 0.175463577437031i |  |  |
| 3 |  | -0.0218189170732251 - 0.0310727302924041i |  | 0.0999536011225474 - 0.0350537308720434i |  |  |
| 4 |  | 0.00998626467491891 + 0.00465364800319168i |  | 0.0851387415516801 + 0.0850999020025338i |  |  |
| 5 |  | -0.128003620859125 - 0.00916848781435778i |  | 8.78932706813300 + 0.137309507063096i |  |  |
| 6 |  | -0.0265199775481283 + 0.273598127967100i |  | 0.0219758222586238 - 0.0127725976159684i |  |  |
| 7 |  | -0.0101009247475450 - 0.0853053200215333i |  | 0.00458352972899659 + 0.00386055601324007i |  |  |
| 8 |  | -0.128245020265205 - 0.0821234395100620i |  | 0.0193497473910602 - 0.0238703321904510i |  |  |
| 9 |  | -0.189891357179889 + 0.0581194413814239i |  | -0.0386341930667510 - 0.00515044802420110i |  |  |

**Experiment 1 (ABCO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of SCFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 1 | -80.4185274076454 | 66.6732304146271 | 2.22816417463824 | 33.7980112768747 |  | 4 | -83.6516454229275 | 103.775839981237 | 4.08045310753873 | 0.208292218951528 |
| 2 | -5.73475327667161 | 64.7531521315298 | -5.34521602732093 | 12.7517317418691 |  | 5 | -17.9364239659184 | 108.638194275093 | 1.24929853633136 | 4.19958266764871 |
| 3 | 55.2855823198794 | 64.2396937902734 | 0.373027726279566 | -1.30952667515906 |  | 6 | 103.403740248413 | 108.662155451134 | 1.10469879981135 | 1.23956887018059 |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 7 | -74.9938072528663 | 66.7272821957063 | 0.827883553792233 | -0.833436680437803 |  | 10 | -74.5114381660778 | 66.7126301523535 | -0.200473045906717 | 1.60405821080168 |
| 8 | 3.85517017614345 | 66.3568727188418 | 0.739806569454907 | 0.372056758987181 |  | 11 | -0.591291701231970 | 70.7149057857339 | 3.76812531090630 | 72.4945374249759 |
| 9 | 74.8640471106682 | 66.6233918708129 | 3.16361082276075 | 2.07482469396068 |  | 12 | 81.0292484006487 | 59.7736562474497 | 2.32267314268511 | 2.19095207640769 |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.000200162304653652 - 0.000521367708992400i |  | 0.00248753899054049 + 0.00177920481176344i |  | -0.00185084544215988 - 0.00217233515766858i |
| 2 |  | 0.000530470484953314 + 0.000806546289767827i |  | 0.000108312795762743 - 0.000199233366108858i |  | 0.000371931208562579 - 0.00393626489968068i |
| 3 |  | -0.000605368453177618 + 0.00315985483607955i |  | -0.0235735868100964 + 0.000548684477923231i |  | -0.000649244980803791 + 0.000238693164575375i |
| 4 |  | -0.00430818713483459 - 0.000462330020369310i |  | -0.000177103381142327 - 0.00244558503070601i |  | 0.00262024160158010 + 0.000628219105573384i |
| 5 |  | -0.000453427292141743 - 0.000882265457319964i |  | 0.00220099716994758 + 0.00248571945280407i |  | -0.00620191245273517 + 0.00273100736000005i |
| 6 |  | -0.000526752444784025 + 0.000245777774039461i |  | 0.00120511493667787 - 0.000628702258572833i |  | -0.000381152915944327 + 0.00157113706054617i |
| 7 |  | 0.000175210095173225 - 0.00111690346206072i |  | -5.20191054495545e-05 + 0.000266617251212388i |  | 0.00111425272203518 - 0.000470239979728981i |
| 8 |  | -0.000540579771454171 - 0.00418783486624956i |  | 0.00725642949936960 - 0.000736353256562251i |  | -0.000263204693547630 - 5.99241587921634e-05i |
| 9 |  | -0.00526983439447616 - 0.00301083540910725i |  | -0.0129031468942469 + 0.00252027307595264i |  | 0.00832865102731430 - 0.000678253878067845i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.0146072560107745 - 0.00467739432534003i |  | -0.000472459136583367 + 0.00137765773840746i |  |  |
| 2 |  | 0.00113110609693131 + 0.000171159747673125i |  | -6.13931455005448e-05 - 0.00205854439369984i |  |  |
| 3 |  | -0.00587539803023995 - 0.000910353975160396i |  | -0.00400151583237879 + 0.00272577461594505i |  |  |
| 4 |  | 0.000333282822816876 - 0.000683484200566889i |  | 0.00257591886158340 + 0.00284008938731980i |  |  |
| 5 |  | -0.00463281424853606 - 0.00264811570497975i |  | 0.000685130760953858 - 0.00143076720884272i |  |  |
| 6 |  | -0.00473359275955279 + 0.00147937904328654i |  | -0.00167246113898339 - 0.0108246044420180i |  |  |
| 7 |  | -4.11451060381054e-06 + 0.00344465098079476i |  | 0.0153334309885618 + 0.00320854460599284i |  |  |
| 8 |  | -0.00236187941609994 - 0.00507227596976939i |  | -0.00535713661440955 - 0.00396732951014134i |  |  |
| 9 |  | 0.000683098365417582 - 0.000371425555243890i |  | -0.00106241447005924 + 0.000222700389554320i |  |  |

**Experiment 2 (PSO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of SCFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 1 | 1175682.64493839 | -91118.3241596252 | 110.645251061771 | 46.5034955802277 |  | 4 | 122878.258530984 | -15956.2242543882 | 23.2263239960976 | -37.3409433850659 |
| 2 | -440.001038106301 | 27427.2652466970 | -79.4981324110795 | 45.5416228929899 |  | 5 | -83.7787949321516 | -162509.357133160 | 13.8823674624933 | 2.82037267996077 |
| 3 | 86321.2632683516 | -357075.191930503 | 5.50120776400218 | 9.24516842027787 |  | 6 | 431466.592710053 | 56521.0477667458 | -32.9610909221376 | -24.1173580860481 |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 7 | -1045404.62329885 | -41270.8988653553 | -58.6192649368526 | -14.2844452282832 |  | 10 | 1027601.85997341 | 150460.630831547 | -25.7843551901686 | 55.8415475078799 |
| 8 | -1566.99590198131 | 116928.273930674 | -75.9735387543763 | -9.17775111795338 |  | 11 | 482.439863485748 | 772599.069549227 | 0.546047506833537 | 165.141058955498 |
| 9 | -391565.356279257 | 36413.7133509163 | 30.7565000530458 | 21.0213700898746 |  | 12 | -1620361.35372969 | -386969.909164621 | 17.5822524711022 | -22.0400798669526 |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.0331096288652324 - 0.0506803587822715i |  | 0.00436755746702667 + 0.00215326459604905i |  | -0.200890325702867 - 0.291912574584618i |
| 2 |  | -0.0125054671979450 + 0.00605780158994794i |  | 0.0312639641753725 + 0.0195987163935764i |  | 0.0654313771232484 - 0.0464585794958826i |
| 3 |  | 0.00113253904717368 - 0.00134281796713567i |  | 0.00336947348532129 + 0.0102630929057556i |  | -3.41511087683113e-130 - 1.69701853565230e-131i |
| 4 |  | 0.00816647112965801 + 0.00235407818611190i |  | 0.00154123913435453 - 0.00112011788539647i |  | -6.54529616025079e-129 - 6.93518491998271e-128i |
| 5 |  | -0.00638260237921563 - 0.00270078423970483i |  | -0.00969537299316652 - 0.00765779102848747i |  | 2.40277012547217e-127 + 2.29186497241386e-127i |
| 6 |  | 251.972123683059 + 233.518855187844i |  | -0.00691391383483399 + 0.00471839111790843i |  | 1.12971288888704e-126 + 2.07419037761574e-128i |
| 7 |  | 0.0115171626678079 - 0.0146004237480589i |  | -2.88238754264349e-05 + 8.50590244505855e-06i |  | -5.02279223551282e-128 + 2.88287330849772e-128i |
| 8 |  | -0.0280721147138455 + 0.00306479003298588i |  | -0.260126450599800 - 0.0493754713831830i |  | -0.000121090398238299 + 6.94743677804069e-06i |
| 9 |  | 0.0122976989351697 - 0.0105198283247223i |  | -0.250973088717461 + 0.0104361498628041i |  | -0.576388276585107 - 0.130519674309554i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.457702866477411 + 0.00776254795172694i |  | 5.13404223994568e-15 - 4.61244771047565e-14i |  |  |
| 2 |  | -0.451405624869880 - 0.602536169496616i |  | 1.87415276144137e-13 + 1.93188586265970e-13i |  |  |
| 3 |  | 0.0453121374335314 - 0.0754817701057223i |  | 8.47999014924868e-13 + 8.91834927886161e-15i |  |  |
| 4 |  | 1.73607277373965e-28 + 1.80565815492772e-28i |  | -3.13819750642420e-14 + 2.42552239276485e-14i |  |  |
| 5 |  | 7.44341619680173e-25 + 6.45258287530396e-25i |  | 2.31442236448623e-05 - 6.84144741351088e-07i |  |  |
| 6 |  | -1.03992064238732e-25 + 1.05348590713333e-25i |  | -1.08604279887320 + 0.204500738072306i |  |  |
| 7 |  | -3.51493875887674e-25 - 1.54579335169058e-25i |  | 0.807524234300353 - 0.977008106210775i |  |  |
| 8 |  | -2.77669679661095e-25 + 7.84701442795721e-26i |  | -1.90881878669630 - 0.896339282712013i |  |  |
| 9 |  | -1.35460075758414e-16 - 2.28074804499010e-17i |  | 1.34949262560125 - 0.158485653127553i |  |  |

**Experiment 2 (ABCO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of SCFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 1 | -523.247590046776 | 316.744937365344 | -6.61487873502212 | -4.51030822129323 |  | 4 | -279.138965595705 | 165.373845754636 | -4.20333191352348 | -1.79629419025466 |
| 2 | 13.3790948316752 | 313.216568788396 | 0.0462773902870410 | -2.50208879148052 |  | 5 | -34.4000154265421 | 166.761631902605 | 4.67555998871234 | -2.30620392848761 |
| 3 | 531.252008756896 | 316.390518140091 | -3.90284715843049 | -1.19713411196336 |  | 6 | 244.943993053861 | 167.889528173605 | -1.68643256336089 | -3.45141809054697 |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 7 | -292.637836695422 | 162.036085112120 | -1.51951426624254 | 0.202401904268010 |  | 10 | -502.423485384945 | 312.555384295802 | -3.78563406473626 | -1.51956585349900 |
| 8 | -10.7920829809616 | 160.611086946138 | -2.39412461018385 | -1.92332885023884 |  | 11 | 11.6535438781612 | 306.813821567819 | -5.71777181549842 | -1.19276121766890 |
| 9 | 248.538941600344 | 162.005075176743 | -1.50219593761915 | 0.643309115186368 |  | 12 | 532.564418156982 | 304.222946075051 | -0.876295826221669 | -1.96221250161511 |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.000120114096594416 - 4.85851750082268e-05i |  | -0.0543199557538460 - 0.0116662668054495i |  | 0.0199496468571170 + 0.00280748638738496i |
| 2 |  | 0.0105071745283974 + 0.00432238301844092i |  | 3.05471231455592e-05 + 0.000173767588753843i |  | 0.103859279606352 + 0.0264695644802260i |
| 3 |  | 0.000115006843260279 - 0.000662690561072904i |  | 0.000174760053581245 + 0.00207034416062697i |  | -4.28654669189776e-05 + 4.31539584380282e-05i |
| 4 |  | 0.00488132506371966 + 0.00264336036249697i |  | -0.00379332643751422 - 0.00129296726882721i |  | -0.000123253801315048 + 0.00464789368576588i |
| 5 |  | -0.0126928039703824 + 0.00287387532340482i |  | -0.00239061484335346 - 0.00315174483462912i |  | -0.00134036942259012 + 0.000177787878723992i |
| 6 |  | -0.000443167024767169 - 0.000148248875109780i |  | -0.00529974752535032 + 0.00146015476373217i |  | 0.000690045422897031 - 0.00151232230495320i |
| 7 |  | 0.0277873317260275 + 0.00508590802127204i |  | -0.000337052243931905 - 5.94066893326937e-05i |  | 0.00523542934406848 - 0.00413479522483336i |
| 8 |  | -0.00693882494323900 - 0.00154136151426393i |  | -0.0602285350521010 - 0.0148773427842778i |  | -7.16861676023358e-05 + 0.000180474846602857i |
| 9 |  | 0.0183516182705334 + 0.00567370427655875i |  | 0.0315095745033682 + 0.00730212083007954i |  | -0.000840142470450389 - 0.00138300921564493i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.00925594271124418 + 0.00338992209896272i |  | 0.0108502823484980 + 0.00330968466266643i |  |  |
| 2 |  | -0.000107108612819349 + 0.00133634263733330i |  | -0.00455516321151537 + 0.00309832632342391i |  |  |
| 3 |  | -0.00753740226188306 + 0.000668395546296156i |  | -0.00642753135973778 - 0.00107772179662050i |  |  |
| 4 |  | 4.78324479473593e-05 + 1.52551970330137e-05i |  | 0.00715609940487057 + 0.00130214235760168i |  |  |
| 5 |  | -0.00726155495002012 - 0.00706919728700294i |  | -5.85703055791392e-05 + 3.86655409315898e-05i |  |  |
| 6 |  | 0.0463606889222429 + 0.0113375773162668i |  | -0.00297459093437926 - 0.00109463900583755i |  |  |
| 7 |  | -0.00758948688192981 - 0.00406733850123541i |  | -0.0108850227277540 + 0.000662801238521302i |  |  |
| 8 |  | 0.00519126261878342 + 0.000761573263944337i |  | 0.00721873223276527 + 0.00335165143709588i |  |  |
| 9 |  | 0.000263222359662144 - 0.000195231390706069i |  | -0.00401259459220790 + 0.00306261904217245i |  |  |

**Experiment 3 (PSO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of SCFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 1 | 0.364059360923501 | 0.109205496643064 | 13.6739289034579 | -6.50790545782554 |  | 4 | -0.354708867128503 | 0.0468593290936665 | -0.559895733789901 | 7.76029558929894 |
| 2 | 3.41446471122383e-05 | 0.201520682864287 | -1.09967517252732 | 5.10965219670377 |  | 5 | 0.000445385012996084 | -0.178840859528027 | 5.71874597862340 | 4.75548919911731 |
| 3 | -0.296545562411297 | 0.00350642870632041 | -1.69644671869925 | -8.47055449167324 |  | 6 | 0.330919366469284 | 0.207170915932400 | -10.5521302911436 | -18.7654870556577 |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 7 | -0.206283606361855 | 0.285970502502338 | 2.03186604963412 | -3.66221794001812 |  | 10 | 0.00510459859915385 | -0.245671090504679 | 2.99063744418281 | -1.52828150937090 |
| 8 | -0.00133171865403113 | -0.175892412026449 | 6.48137483940642 | 3.61045869005091 |  | 11 | -0.00389125349456875 | 0.117761495444509 | 4.28796666059927 | 22.1906351059140 |
| 9 | 0.0665822422524986 | 0.0405702515619274 | 10.7781774579242 | -3.35994891949855 |  | 12 | 0.236257379842572 | 0.0666114431870608 | -0.808842888049726 | -9.89554244039875 |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.000139298468322445 + 0.000180881936351439i |  | -1.20620428111340e-05 + 8.32048707402226e-06i |  | -0.000390806323936694 + 0.000131893676992454i |
| 2 |  | 0.000171507471921563 - 8.16221018987476e-06i |  | 1.88155672950495e-05 - 9.16851932730122e-06i |  | 0.000415275871369933 - 9.54054141160934e-05i |
| 3 |  | -0.000257770258785590 + 0.000279196647289304i |  | 3.69400853594759e-06 - 1.16855796128315e-05i |  | -0.00636024902401021 + 0.00183917009752327i |
| 4 |  | -0.000181940059464020 + 0.000163316855118733i |  | -6.38483424877761e-06 + 5.73900031659787e-06i |  | -0.00189094019425608 - 0.000107612901410554i |
| 5 |  | -0.000326443306554557 + 0.000174056582373187i |  | 0.306780386954774 - 0.130157063179541i |  | 0.000263979963479893 + 0.000445837899651597i |
| 6 |  | -3.43340719623534e-05 + 9.77226100846744e-05i |  | -0.249330886400753 + 0.331298214897051i |  | -0.00377711997758701 + 0.000166319130133132i |
| 7 |  | 1.22480489607869e-05 - 5.32605288914867e-06i |  | 0.517870394988018 - 0.415477398535337i |  | 0.000773745712558836 + 0.000314335155618838i |
| 8 |  | 1.32305678952422e-05 - 3.00025423012583e-05i |  | -1.10791203728623 + 0.592349174961461i |  | -0.000139037688511284 + 0.000370537479945362i |
| 9 |  | 9.48620298804334e-06 - 5.66624860738449e-06i |  | 0.307435260541862 - 0.0996185341172510i |  | -0.000343905432018640 + 0.000197256464725279i |
| 10 |  | 8.22956609395581e-06 - 3.19058705351075e-05i |  | 0.00196807877773084 - 0.000532134964819747i |  | 0.000384166127350018 - 0.000206107882339807i |
| 11 |  | 7.38430507114397e-06 - 4.83554036401130e-06i |  | -0.00167196000679944 + 0.000541815933628474i |  | 0.000688707777300197 - 0.000411761350511158i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.000123362280556370 - 6.72654154841597e-05i |  | -0.000131544239940310 + 0.000213393664582409i |  |  |
| 2 |  | -0.000279459635557169 + 0.000120574461067877i |  | -0.000815923566191780 + 0.000768702971594679i |  |  |
| 3 |  | 0.00214815058400546 + 0.000730143237214070i |  | -0.000749859582608861 - 0.000953388682769940i |  |  |
| 4 |  | -0.00576420315333710 - 0.00214497585794172i |  | -0.000702874516816682 + 0.00103186264496272i |  |  |
| 5 |  | -0.00157072535282850 - 0.000658532595504661i |  | -0.00426843733227736 - 0.00380073102362789i |  |  |
| 6 |  | 0.00143773067485106 + 0.000436328483833008i |  | -0.00219232249185287 + 0.000740965486125390i |  |  |
| 7 |  | 0.00672482864136411 + 0.00331230863330927i |  | 2.29094830251148e-07 + 2.28101732988379e-07i |  |  |
| 8 |  | 0.000222683733398048 + 0.00143574218508974i |  | 5.60769873544193e-07 + 2.91019951559021e-07i |  |  |
| 9 |  | 0.000774265250604884 + 0.00610035331491073i |  | 1.74820711256886e-07 - 6.82265753306299e-09i |  |  |
| 10 |  | 0.000227170025056156 - 0.000573064547222715i |  | -1.66593019593273e-07 - 2.65726402235482e-07i |  |  |
| 11 |  | -0.000232553931413528 + 0.000765885888419879i |  | -1.52057583583889e-07 + 3.68512565317277e-07i |  |  |

**Experiment 3 (ABCO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of SCFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 1 | -0.679809172656058 | 0.323949415191743 | -9.03061567840055 | 3.29879311854016 |  | 3 | -8.21458266906843 | -0.122805948073720 | -0.640638729486899 | 0.691509274240799 |
| 2 | 1.26422644294737 | -0.312507621201571 | -0.493051980012360 | 0.956588511332248 |  | 4 | -0.635809670580564 | -2.04783864749184 | -0.429279491964806 | -3.45052926412702 |
|  |  |  |  |  |  | 5 | -0.188600832477290 | -2.55943788549497 | 1.77570398360914 | -2.79351856931500 |
|  |  | | | |  |  |  | | | |
| SCFS |  |  |  |  |  | SCFS |  |  |  |  |
| 6 | -10.4381486180413 | 4.36923207495558 | -3.92612468702524 | 2.96797189804313 |  | 9 | -0.117788158394672 | -0.0447980452958032 | -1.68318723819821 | 0.486576115381967 |
| 7 | 0.860776935141097 | -1.07819912725829 | -0.703270592492693 | 0.626738656082491 |  | 10 | -0.215668335760663 | 0.309621901856135 | 0.223279742207010 | -0.00155467564895462 |
| 8 | 0.277099700002411 | -1.29017111352462 | 0.313569479049900 | -0.383205435326191 |  | 11 | -0.365173349429637 | 0.0101475668897943 | 2.22134524353653 | 2.00858278545182 |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.00516987640499881 + 0.00736216737883042i |  | -0.0213045884905404 - 0.00347347031510091i |  | 0.000936538167919178 + 0.0105130989698457i |
| 2 |  | 0.00157677854201481 - 0.00212694662643163i |  | -0.189212608418730 + 0.0293246479250852i |  | 0.0233204047223334 + 0.00415411371343493i |
| 3 |  | 0.0158118157728288 + 0.0122718879582554i |  | -0.00161637500951456 - 0.000372661107022193i |  | -0.00967900702980170 - 0.00393276156916465i |
| 4 |  | -0.00299258556693051 + 0.0114813723606872i |  | 0.000831336168713399 - 0.000289517173671533i |  | 0.00542411916799503 + 0.00846342387475673i |
| 5 |  | 0.000155918211688552 + 0.000233186985474157i |  | 0.00219453195532249 + 0.000277640684191689i |  | 0.0120161518430736 - 0.00761498442133258i |
| 6 |  | -0.0138682142658347 - 0.000196593281794130i |  | 0.00558556787395662 + 0.00410436779500392i |  | -0.0955048691051704 + 0.118249262820426i |
| 7 |  | 0.0142596215952393 - 0.00346508570762026i |  | -0.000936726740369950 - 3.95232220245585e-05i |  | 0.0471866222604380 - 0.102872365619815i |
| 8 |  | 0.0272789781329724 - 0.00404892466662344i |  | -0.00897124045903662 + 0.00282404872737522i |  | -0.0275313035296537 + 0.0377226121318500i |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.0378196766955741 + 0.0424059828770994i |  | 0.000548375591232434 + 0.00167037326519984i |  |  |
| 2 |  | 0.00000000000000 + 0.00000000000000i |  | -0.000554843886669747 - 0.00239828786211894i |  |  |
| 3 |  | 0.00000000000000 + 0.00000000000000i |  | -0.000104997476106339 + 0.00309915696628356i |  |  |
| 4 |  | 0.00000000000000 + 0.00000000000000i |  | -0.00159390196554399 + 0.000766735228545231i |  |  |
| 5 |  | 0.00000000000000 + 0.00000000000000i |  | -0.00140198722451859 + 7.25373817786734e-05i |  |  |
| 6 |  | 0.00000000000000 + 0.00000000000000i |  | -0.00117675679305097 + 0.00258014115779062i |  |  |
| 7 |  | -0.00377882674055114 - 0.00519923577395830i |  | 0.000349062805380913 + 9.49961156875206e-05i |  |  |
| 8 |  | 0.00512157199522229 - 0.000767868201492173i |  | -0.000870739362021706 + 0.000625615609803075i |  |  |