**Experiment 1 (PSO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of CFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 1 | -4558.28468327913 | 25840.3034243600 | 19.1577657432995 |  |  | 4 | 61536.0367117965 | -52910.8814697379 | -16.1065095987886 |  |
| 2 | 1279.04297898411 | -14129.3412012545 | 29.4262610460317 |  |  | 5 | 1323.19931703993 | 408.112015008134 | -44.5849017174739 |  |
| 3 | -21115.4191533398 | 8730.41349608600 | -29.5726672978593 |  |  | 6 | -6918.20556510622 | -53359.2944765911 | 23.0447618213424 |  |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 7 | 2501.79161685393 | -4882.46980889979 | -0.367979618604825 |  |  | 10 | -50245.4084202640 | 17932.1642696899 | -13.7136093915899 |  |
| 8 | -4679.04629921144 | -18405.4702272164 | -40.2898449689374 |  |  | 11 | 300.228725134805 | -15809.6800150017 | 26.8366157213646 |  |
| 9 | 19492.4554073367 | -4486.08350381096 | -11.5129538113863 |  |  | 12 | 4679.29769066119 | 1232.56952744925 | 24.3290848338067 |  |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -2.54813157535768 - 1.32126782120085i |  | -0.00249417849890400 + 0.00283391941441770i |  | 0.550436418134769 - 0.506574134739367i |
| 2 |  | -0.0207294028661212 - 0.0523077920343918i |  | -0.738863222819012 - 0.836745958764189i |  | 0.000255301101721405 - 0.00147262306179426i |
| 3 |  | 0.0879344946346050 - 0.0595141089524057i |  | -0.326175932334831 + 2.96657357402162i |  | -0.00458230017212036 - 0.00170893087382559i |
| 4 |  | 0.118015534595530 + 0.0369606038444696i |  | -0.266147463037509 - 0.964329894976127i |  | 0.0149999209561063 + 0.000635241706736242i |
| 5 |  | -0.0194203777716545 + 0.0381006642922585i |  | -3.46508701840433 + 1.65167989347684i |  | -0.0434234801813333 - 0.0235997048801641i |
| 6 |  | 0.470139027701569 - 0.164918819177422i |  | -0.0901564433213600 + 0.00812039266308673i |  | 0.301407747636061 - 0.202790053038168i |
| 7 |  | -0.0733974148648419 + 0.576039491218290i |  | 0.115350672345640 + 0.163055955194841i |  | -0.253354928921889 + 0.137472563992099i |
| 8 |  | -6.33853841292327 - 0.290554498417423i |  | -0.100710043930778 - 0.269426832226302i |  | -0.948768459702517 - 0.690345680028117i |
| 9 |  | 0.484416311289139 - 0.467201119115327i |  | -0.0991806596241528 + 0.187066130373012i |  | 0.627046724301362 + 0.162626499303565i |
| 10 |  | 0.616363518619719 - 0.346406470352156i |  | 0.0463490565513887 - 0.00310491566796438i |  | 0.477317525051330 - 1.04758988292604i |
| 11 |  | -3.24030668745948 - 1.64836654833168i |  | 2.35246321659003e-05 - 3.20838887226577e-05i |  | -0.184645615377975 + 0.166397029525030i |
| 12 |  | 0.0315067836784583 + 0.0500802301194371i |  | 0.00546748991031598 - 0.00641406951736846i |  | -0.0353959007428657 - 0.0190229863970256i |
| 13 |  | -0.0563114109503821 + 0.0137029802260752i |  | -0.00785683666579148 - 0.00529688215456403i |  | 0.0339918226922295 + 0.0339067090783852i |
| 14 |  | -0.120123044456605 - 0.0333950772527412i |  | -0.00512027638367913 - 0.0335207836295345i |  | 0.0512670545592712 + 0.0741333590970415i |
| 15 |  | -0.0269448709969577 - 0.0142918640306400i |  | -0.00298096435944972 - 0.0107374284941406i |  | -0.0503591146818586 - 0.0153293247229724i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.204194640238333 - 0.288535305609768i |  | 0.0307492493093909 - 0.00694317191816867i |  |  |
| 2 |  | 0.0923828645518976 + 0.0572789737712967i |  | -2.39716683210384 - 2.48659783134745i |  |  |
| 3 |  | -0.0581981134582080 - 0.0446331200239468i |  | -2.84971167657246 + 0.0367239414767424i |  |  |
| 4 |  | -0.231998837352985 - 0.122992692188526i |  | -0.0303283248142299 + 2.71506359270553i |  |  |
| 5 |  | 0.113290340414632 + 0.0365565928455049i |  | 0.168427196377776 + 0.257241879745793i |  |  |
| 6 |  | 5.51665854031740 + 2.92153155554555i |  | -1.92216123796064e-05 + 1.80075028315681e-05i |  |  |
| 7 |  | -0.0111848032941499 + 0.000127202924542243i |  | -0.0861305671271997 - 0.0382176640789613i |  |  |
| 8 |  | -0.0315491889214651 + 0.0149716776596054i |  | -0.00630846529815008 + 0.0665950733004793i |  |  |
| 9 |  | -0.00814523927226033 + 0.0248687996569897i |  | 0.0400981789437242 - 0.0828596860259607i |  |  |
| 10 |  | -0.0273298650120213 - 0.00230455808413667i |  | -0.0490483535292711 + 0.0506072481518532i |  |  |
| 11 |  | -0.164264843112915 - 0.617234096083745i |  | 0.406620752265894 - 0.202358201184281i |  |  |
| 12 |  | -0.0536792993475073 + 0.00953788603165740i |  | 0.421861373404715 - 0.436214865335629i |  |  |
| 13 |  | 0.00436615310043444 + 0.0158956926042390i |  | 7.32290907869832 + 0.735420511682009i |  |  |
| 14 |  | 0.0448553869559992 - 0.0338494449684479i |  | -1.07431858032811 + 0.274555993749841i |  |  |
| 15 |  | 0.0367090331287845 - 0.0311363772865125i |  | -1.08735120343717 + 1.42811731093698i |  |  |

**Experiment 1 (ABCO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of CFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 1 | -140.301258378765 | 103.541731693890 | 2.00738555228193 |  |  | 4 | -140.294642967804 | 104.466508617429 | -5.60768001801262 |  |
| 2 | -19.3767490646998 | 105.359400791259 | 2.03526838984821 |  |  | 5 | -20.0314010154246 | 102.854462882073 | 1.98156053158655 |  |
| 3 | 110.624039591599 | 104.919844274017 | 1.55808684289889 |  |  | 6 | 109.711103217049 | 106.500893008716 | 1.96623536558377 |  |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 7 | -109.686566089321 | 94.1965455891455 | 1.31018898104778 |  |  | 10 | -114.505553097647 | 96.5005772366015 | 1.86968620700165 |  |
| 8 | -33.3289439698996 | 94.7331414226146 | 1.65050510166596 |  |  | 11 | -32.6151163711278 | 99.2823117874333 | 1.89209397771425 |  |
| 9 | 71.5325798764348 | 95.3250916480847 | 2.23836900842282 |  |  | 12 | 58.1846328389849 | 93.7177453817741 | 1.38079803201121 |  |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -9.30990978774124e-05 - 0.000203663015045753i |  | -0.000392589226637803 + 0.00107701856648950i |  | 1.42426162436065e-05 + 0.00255250899486536i |
| 2 |  | 0.00277708400696446 + 0.0166795261674406i |  | 0.00869856495336861 + 0.0120119708994643i |  | -0.00127548518794644 + 0.0185051855132182i |
| 3 |  | -0.000257825802722036 + 0.0182335506197677i |  | -0.00428482172701592 + 0.0508015797521871i |  | -0.00118359375678444 - 0.00442164445609692i |
| 4 |  | -0.00295447302481963 - 0.00280503861687566i |  | -0.00167965672234728 + 0.00129434064427395i |  | -0.000256158841138715 + 1.31258927813046e-05i |
| 5 |  | 0.00378323178879880 - 0.00956974957986496i |  | 0.000487499934765667 - 0.000315647853743161i |  | -0.00268272651545949 + 0.00541112885871232i |
| 6 |  | 0.000103257230152793 - 0.000271295873441645i |  | 0.000929894996106616 + 0.00311880901968343i |  | 0.00580180129941465 - 0.00501084671040219i |
| 7 |  | -0.00560368989276980 + 0.0102223140744564i |  | -0.00157899695716238 + 0.00398777338203344i |  | 0.00127840518806259 - 0.0462472191499186i |
| 8 |  | -0.00118062506998821 + 0.00136105730259856i |  | 0.00143979960756438 - 0.000946419088978753i |  | 0.00439848605211398 - 0.00312095737005207i |
| 9 |  | 0.00183404714827264 - 0.0213349563919483i |  | 0.000757981886506201 + 0.00151478923317963i |  | -0.000124156967723364 - 0.000212206642967739i |
| 10 |  | 0.00167796682869429 - 0.00418368070057422i |  | 0.000163696869089809 - 0.000267166766324074i |  | -0.00495591708827214 - 0.00129524109640511i |
| 11 |  | 0.000134986446570526 + 0.000615772754721420i |  | 0.00242364227445167 - 0.00850896763909932i |  | 0.00316094697751006 - 0.000521866883047708i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.00473256094356549 - 0.0102520333746044i |  | 0.000507728334732853 + 0.00445861821896885i |  |  |
| 2 |  | -0.00179544268334028 + 0.00517420826658838i |  | 0.000226853775713523 - 7.13011467654615e-05i |  |  |
| 3 |  | -1.31506479069896e-06 - 0.000156556402223025i |  | 0.000672018353397212 - 0.0103549059695346i |  |  |
| 4 |  | -0.00303572434569833 + 0.00151660952914356i |  | 0.000342766669067981 + 0.00380616347664107i |  |  |
| 5 |  | -0.00587627201906740 - 0.00580409337216536i |  | 0.00297212330817280 + 0.0143243391503022i |  |  |
| 6 |  | 0.00337127114393586 - 0.000420452023331452i |  | 0.00124829592349032 + 0.00467842380002176i |  |  |
| 7 |  | 0.000277637912067508 - 0.0146932259476799i |  | -0.000112981510033824 + 0.000258563593968246i |  |  |
| 8 |  | 0.000138053498053275 - 2.26964111966766e-05i |  | 0.00112496657539974 + 0.00267038155286460i |  |  |
| 9 |  | 0.00316410649952526 + 0.00195136254828060i |  | -0.00123955515244016 + 0.00682249295201833i |  |  |
| 10 |  | -0.00210606926164420 + 0.000557332997565363i |  | -0.000580169055948856 + 0.0143044764229077i |  |  |
| 11 |  | -0.000218795949964811 - 0.00248330974326581i |  | 0.00115055158035410 + 0.00552450801294093i |  |  |

**Experiment 2 (PSO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of CFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 1 | -334547.468723794 | 43245.1623497823 | 5.62030148482614 |  |  | 4 | 115058.008987404 | -10601.9514495086 | 4.59808218452449 |  |
| 2 | -89.5420319770147 | 33551.2179406100 | -1.24850996662876 |  |  | 5 | -320.284245951271 | -6280.54835548931 | 4.55821271804435 |  |
| 3 | 182570.008007385 | -728.663348142869 | 1.76402276529507 |  |  | 6 | -20597.8179541516 | 1377.26001789588 | 5.41287146984202 |  |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 7 | 20121.0733235008 | -8892.17096018843 | 11.2662487504817 |  |  | 10 | -69891.1926167329 | 4361.04476177535 | -9.47588898645075 |  |
| 8 | -75.7704168513346 | -34163.7033733344 | 5.95412935913886 |  |  | 11 | 66.9212331019967 | -33184.6620687054 | 1.73686308769124 |  |
| 9 | 57775.6876862734 | 11373.3776156036 | -1.05553138722681 |  |  | 12 | -136030.742010245 | -1887.38917800152 | 14.9048808702474 |  |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.00573154133932113 - 0.00102100502664009i |  | 0.00000000000000 + 0.00000000000000i |  | 3.96826749904354e-35 - 2.92107578257135e-35i |
| 2 |  | -0.00911197809614724 + 0.00243140978464711i |  | 0.00000000000000 + 0.00000000000000i |  | 2.43691053721019e-33 - 1.51376188329938e-34i |
| 3 |  | -0.00628296950587533 - 0.00430966303152620i |  | 0.00000000000000 + 0.00000000000000i |  | -0.0204259275131240 - 0.00817417325605201i |
| 4 |  | 0.000642291899039764 + 0.000692329123389003i |  | 0.00000000000000 + 0.00000000000000i |  | 0.0151655052495621 - 0.000991421963953126i |
| 5 |  | 0.00158051319802930 + 0.00176736262380526i |  | 0.00000000000000 + 0.00000000000000i |  | 0.00532609755493383 - 0.00562220018158079i |
| 6 |  | 0.00000000000000 + 0.00000000000000i |  | 0.00000000000000 + 0.00000000000000i |  | 0.0186497675702391 + 0.000202968453883843i |
| 7 |  | 0.00000000000000 + 0.00000000000000i |  | 4.15404330417347e-36 - 4.27451763829690e-37i |  | 0.0100857562030892 - 0.000266730579815550i |
| 8 |  | 0.00000000000000 + 0.00000000000000i |  | -2.61318067630844e-33 - 4.65459915254558e-35i |  | -2.14102134671959e-16 - 1.52065191082135e-16i |
| 9 |  | 0.00000000000000 + 0.00000000000000i |  | -2.81205988357747e-33 + 1.81244711210611e-34i |  | 3.82789815645375e-13 + 3.10547468293150e-13i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -4.44241429220504e-13 - 2.48985763090091e-13i |  | -0.00179881843138336 + 0.0752769209537848i |  |  |
| 2 |  | 3.54749886932922e-14 + 3.54747744772967e-14i |  | 1.20578773383398 + 0.509253774768853i |  |  |
| 3 |  | -1.44914712475819e-13 - 3.39644960437516e-13i |  | -0.302364641127685 - 0.660075746160531i |  |  |
| 4 |  | -0.000176202846289421 + 0.000221530616870427i |  | 0.0414986659798157 + 0.0437579139839865i |  |  |
| 5 |  | 2.19851553121915 - 2.52379317484853i |  | 3.29170330318041e-46 + 1.52458732787356e-43i |  |  |
| 6 |  | -0.0647286643389464 - 0.607947968117343i |  | 1.91048795993119e-43 + 3.73423666223574e-42i |  |  |
| 7 |  | -0.0649555645633306 + 0.110646551408447i |  | -2.53980251147377e-41 + 3.22931846979587e-41i |  |  |
| 8 |  | 0.942838876986286 - 1.59082368330072i |  | 5.25278236499034e-42 + 8.05667414785323e-42i |  |  |
| 9 |  | -90.2567720009931 + 281.389220593225i |  | 2.46810467869226e-41 - 1.95745694559013e-40i |  |  |

**Experiment 2 (ABCO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of CFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 1 | -499.418930093566 | 327.892189410447 | 1.18814630238412 |  |  | 4 | -285.300886862971 | 169.776173820535 | 4.58721387761672 |  |
| 2 | 16.2495764747801 | 318.353525311120 | 2.17910289032411 |  |  | 5 | -14.7354083731907 | 170.350778107807 | -2.39617681775500 |  |
| 3 | 536.680101874148 | 319.530852624055 | 1.82321053420039 |  |  | 6 | 251.927055479284 | 169.791051912353 | -1.27441242118185 |  |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 7 | -285.483574641962 | 164.265973426689 | 3.01226120965202 |  |  | 10 | -498.207921670014 | 316.863708967458 | 7.06467579328104 |  |
| 8 | -10.6033111317098 | 161.961003059365 | 1.99358036889590 |  |  | 11 | 18.0018138445326 | 316.459366445228 | 1.99121012947081 |  |
| 9 | 250.209435736005 | 166.327929271484 | -2.98469178227402 |  |  | 12 | 536.730315715070 | 315.737390910791 | 5.51284068258626 |  |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 9.97271427683362e-05 + 4.69656236453962e-06i |  | -0.0329190457477430 - 0.00256784454542628i |  | -0.0189384651101737 - 0.00700600743614356i |
| 2 |  | -0.00734064189172600 + 0.000535441455573183i |  | 3.98712055181816e-05 + 8.78301519061986e-05i |  | 0.0289914862048951 + 0.00296763195831257i |
| 3 |  | 0.0182779914593480 + 0.000508571360911549i |  | 0.00530764540847579 + 0.000715149416616514i |  | -3.33784593672831e-05 + 4.73979143638429e-05i |
| 4 |  | 0.00400177382995101 - 0.00460051168400941i |  | 0.00158070519788213 - 0.00205539160608891i |  | -0.00449173361704663 + 0.00327671002571500i |
| 5 |  | -0.000754823449578113 - 0.00386936410519902i |  | -0.0121113929556611 + 0.00158828761633269i |  | 0.000137034861483200 - 0.000270396370370204i |
| 6 |  | 0.000392672076980994 - 5.88463685674058e-05i |  | -0.00172276032698950 + 0.00483950470849299i |  | 0.00337823399625005 - 0.000989474787106723i |
| 7 |  | -0.00865879948633252 + 0.00687709859717060i |  | -0.000637749488177999 - 9.00262099106719e-05i |  | -0.000533595711150425 - 0.00607046611891113i |
| 8 |  | -0.0172884704083353 - 0.00368638464472263i |  | 0.0249015093920474 - 0.0200496548399758i |  | -9.64330174039363e-05 - 1.77922123691857e-05i |
| 9 |  | -0.00452847593229955 + 0.000583485596504496i |  | -0.00118882349369864 - 0.000237253507702524i |  | -0.000650091978959077 + 0.00230260413316231i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.00384254843504723 + 0.00913876063661424i |  | -0.00186930632072640 - 0.00326075908853665i |  |  |
| 2 |  | -0.00489771463802506 - 0.00677082934249936i |  | -0.00515591266412642 - 0.00721162078560190i |  |  |
| 3 |  | -0.0113605007823586 - 0.00272826886328262i |  | -0.0196405442421870 + 0.00397875720092910i |  |  |
| 4 |  | -0.000105271264207706 + 4.33864957650075e-05i |  | -0.00584605430864079 + 0.00616763723282542i |  |  |
| 5 |  | 0.00324679904169078 - 0.00547923472257907i |  | -0.000318778233957608 + 8.07490074873391e-05i |  |  |
| 6 |  | 0.00338325884940664 - 0.00275203918833828i |  | -0.00512775590082791 - 0.00222662093409821i |  |  |
| 7 |  | 0.00591278950854324 - 0.00664535544048258i |  | 0.0140594273704441 - 0.00240153299527301i |  |  |
| 8 |  | -0.00830531431906568 + 0.00183360837478950i |  | -0.00788513594736025 - 0.00115365609633010i |  |  |
| 9 |  | -0.000175609836256089 - 3.10562287048849e-05i |  | -0.00361694744660548 - 0.00523558983610712i |  |  |

**Experiment 3 (PSO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of CFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 1 | 8300.89558778018 | -1223.91982817996 | 2.52090011825473 |  |  | 4 | 28776.6069503138 | 2067.00225319022 | 11.6493574085332 |  |
| 2 | -30.6816048767492 | 510.822165192466 | -11.5660488515203 |  |  | 5 | 14.5471434740997 | 7893.72679901094 | 12.2787128109536 |  |
| 3 | -1454.42550543737 | -1077.84231373553 | 13.7530095683854 |  |  | 6 | -1836.49767228550 | -1060.14403924234 | -13.5044513796050 |  |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 7 | -1985.48722457492 | -5004.97121961501 | 1.73789111618731 |  |  | 10 | 114.920031999803 | -3753.88309220276 | 22.2312914357854 |  |
| 8 | -0.860815420573933 | 994.281796501861 | 1.23457486186516 |  |  | 11 | 4.25379296751346 | -1528.78570622715 | 4.80600710315814 |  |
| 9 | -3459.40237349361 | -640.236802165328 | 6.77076356245645 |  |  | 12 | 2710.87517635736 | 322.687902533273 | 4.98633436185924 |  |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.00143265578452715 + 0.000987699979967796i |  | 2.24439733248170 - 1.46248030353732i |  | 0.00456701591972684 - 0.00224049789156206i |
| 2 |  | -0.00185302043252025 + 0.000548790718298457i |  | -9.83472687981590e-05 - 0.000156620703361069i |  | -0.00251656637943827 - 0.00171283112230016i |
| 3 |  | 0.00232012690968884 - 0.00783979842780016i |  | 0.00545976738294085 + 0.00309493789360375i |  | 2.53178044899739e-33 + 1.67445043821201e-32i |
| 4 |  | -0.00160899728434292 + 0.00195120366096549i |  | 0.0112683515076468 + 0.00199371574802836i |  | -2.00140681348684e-31 - 5.27238636710507e-31i |
| 5 |  | -0.00561938688327807 - 0.00156268367947557i |  | -0.00554636322237007 + 0.00405982373606893i |  | 1.13417171636974e-30 + 6.44987680538967e-30i |
| 6 |  | 0.0333469148380111 + 0.0156131419166057i |  | 0.00688003450727213 + 0.00128631420410451i |  | 1.01963038266515e-30 + 4.16868399268388e-31i |
| 7 |  | 2.95294074002371 + 0.750117504740856i |  | 0.00610434995721275 + 0.00327487575804899i |  | -8.73050851951570e-31 - 1.22232220616743e-30i |
| 8 |  | -19.5975128257010 - 7.58646315279859i |  | 0.000313179473225418 + 0.000826418313650624i |  | 0.000785227025354484 - 0.00655746817684615i |
| 9 |  | -4.39168022122070 - 11.4959021077659i |  | 0.0107546621857613 - 0.00118724466193561i |  | 0.00461386633943640 + 0.00374743707748887i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -0.00154108983067061 + 0.000758411790695546i |  | -0.00398965769444914 + 0.00286453688200807i |  |  |
| 2 |  | 0.00418838486170571 - 0.000731022955627107i |  | 0.000141096776414715 + 0.00132857776779097i |  |  |
| 3 |  | 0.000635364994942624 + 0.000342981172356051i |  | -0.00355309641011188 + 0.00522775455646000i |  |  |
| 4 |  | 2.66388587872806 + 4.85426783909895i |  | 0.00265097546597314 + 0.000357240510108346i |  |  |
| 5 |  | -0.428793529845388 + 0.00924633037076427i |  | -1.18438672587449e-05 - 7.28585240417424e-05i |  |  |
| 6 |  | -0.346820723676221 - 0.0634923144104331i |  | 0.000981099502132390 + 0.000431121794290145i |  |  |
| 7 |  | 0.0713123881952817 + 0.155287790041171i |  | -0.000160328833610896 - 0.00160954759219720i |  |  |
| 8 |  | 0.149557853830248 - 0.115409523749042i |  | -0.000690721032510642 - 0.00673150413819163i |  |  |
| 9 |  | -0.000331568924757066 + 0.000693806627770284i |  | -0.00180847600517034 - 0.0132652107848629i |  |  |

**Experiment 3 (ABCO)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameters of CFSs | | | | | | | | | | |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 1 | -71.7571657301563 | 64.2709254115782 | 19.9266266976274 |  |  | 4 | -130.888112130692 | 109.521887350157 | -8.36266539098198 |  |
| 2 | -0.345374874792896 | 74.2823624498736 | 2.64090281335112 |  |  | 5 | -8.33452717030635 | 108.592830288887 | 11.1849162443624 |  |
| 3 | 68.5983342716470 | 68.5918692177172 | 13.2142764541209 |  |  | 6 | 116.528746729857 | 115.775254290278 | 15.3706134563567 |  |
|  |  | | | |  |  |  | | | |
| CFS |  |  |  |  |  | CFS |  |  |  |  |
| 7 | -66.5660655422229 | 70.8781468290829 | 8.58501101839087 |  |  | 10 | -71.8844654847448 | 70.1238969074020 | 12.0497460401256 |  |
| 8 | -0.188217975666021 | 71.4969632579415 | 2.76728950863021 |  |  | 11 | -3.69128797640111 | 70.0475515032789 | 8.66436883734630 |  |
| 9 | 83.0654234839270 | 73.7843941947692 | 8.47270249749666 |  |  | 12 | 82.9940915371863 | 72.2699520926760 | 12.9068487079922 |  |

Parameters of T-S neurons

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | -3.22846776065709e-05 + 0.000149828751877301i |  | 0.00997142660140384 - 0.00382769337678469i |  | -0.00109324546098256 - 7.58477595716217e-06i |
| 2 |  | 0.000197880225619470 - 0.000932393193310727i |  | -0.000116902448936492 + 7.07181995998491e-05i |  | 0.000956009429490935 - 0.000536022637105805i |
| 3 |  | -0.00467996149186652 + 0.00204067293821155i |  | -0.00362220466245425 + 0.000630245096304798i |  | 2.57889125613910e-05 + 9.50044763440482e-06i |
| 4 |  | -0.000997890632416032 - 0.000622412036184221i |  | 0.00305561738011889 - 0.00144242424340622i |  | -0.00378407277035084 + 0.00135335983304252i |
| 5 |  | -0.00683539190588841 + 0.00908879821004552i |  | 0.000290335831253353 + 0.00210618598671598i |  | 0.000322819694174296 - 0.00274114424033239i |
| 6 |  | -0.000159549369770606 + 0.000193448797767286i |  | 0.000941092800896502 + 0.00116623689532341i |  | 0.000883435034001625 - 0.00113441436397477i |
| 7 |  | -0.000878312958246056 + 0.000819871673973074i |  | -7.10810127741947e-05 + 9.48871010999780e-05i |  | 0.00333643863726328 - 0.00275826479984179i |
| 8 |  | -0.0281863582707235 + 0.00753743813052469i |  | 0.000422917624302780 + 0.00244973746888712i |  | -1.78964892761212e-06 - 2.18052770635155e-06i |
| 9 |  | -0.00854804273075835 + 0.00844899748540855i |  | -0.000288080809622336 + 0.00122109817869818i |  | 0.000622835473506720 + 0.000145382154610665i |
|  |  |  |  |  |  |  |
| T-S Neuron |  |  |  |  |  |  |
| 1 |  | 0.000612476633949114 - 0.000298453585709272i |  | -0.00266714198554755 - 0.000742885530219075i |  |  |
| 2 |  | -0.00234090325519883 + 0.00180517916897196i |  | 0.000401063759326308 - 0.00172047145381933i |  |  |
| 3 |  | -0.000522168385611131 + 2.06755020770748e-05i |  | 0.00739281955680023 - 0.00230145024957544i |  |  |
| 4 |  | -3.29615784795441e-06 + 4.51205265674709e-06i |  | -0.000519493181681359 - 0.00293595687440966i |  |  |
| 5 |  | -0.000224526704272887 - 0.00104035184838032i |  | 0.000282062230944898 - 4.37899282765144e-05i |  |  |
| 6 |  | 0.00526039040699596 - 0.00213773544328903i |  | -0.00728892326458588 + 0.00345941050156906i |  |  |
| 7 |  | 0.000695213023642999 - 0.000753702695957723i |  | -0.00265525740361707 + 0.000642253457501282i |  |  |
| 8 |  | -0.0282019410748405 + 0.0216030471677167i |  | 0.00539623374046032 - 0.000285923159462669i |  |  |
| 9 |  | 0.000176142037803860 - 0.000154911617610417i |  | -0.000705688156226014 - 0.000216614188903312i |  |  |